

Subject Index

- 1,2 dibromo 3 chloropropane 1658
17 beta estradiol 545
2,4 D 177
21st Century 731
3,5,6 trichloro 2 pyridinol 1397
abandoned land 215
Abandoned mined lands
 reclamation 631
abandoned peatland 659
abatement cost 1758
abiotic factors 1352
abiotic injuries 579
abiotic transformations 480
aboveground biomass [AGBM]
 812
Abrasion 1461
abscisic acid 1591
absorption 671, 1202, 1376
Abundance 1101
Acari 1342
acaricides 747
Accipiter gentilis 424, 1708
Accumulation 1159
accuracy 136, 1563, 1774
acetochlor 833
acetylcholinesterase 834
acid damaged lakes 1296
acid deposition 585
acid mine drainage 918, 919, 920,
 922, 1170, 1419, 1662
acid particulates 1296
acid rain 551
acid volatile sulfides 1507
Acidic Water 1418
acidification 68, 481, 544, 649, 652,
 696, 869, 920, 1345, 1404,
 1419, 1642
acidifying additives 8
acidity 1418, 1479
Acrididae 477
actinomycetes (Actinomycetes and
 Related Organisms) 336, 909
actinomycetes (Actinomycetes and
 Related Organisms):
 decomposer, xenobiotic
 degrading microorganism
 670
Activated Carbon 1575
activated sludge 783, 985
active soil biology 1552
acute toxicity 1406
adaptability 1082
adaptation 365, 1264, 1418
Adaptations 1418
adaptive management 862
adenosinetriphosphatase 1490
Adenovirus (Adenoviridae):
 disinfection resistance,
 pathogen 370
adjustment 345
adjuvants 494
administrative guidance 1808
adsorbed organic material:
 concentrated bacterial
 substrate source 1618
adsorbents 8
adsorption 9, 439, 695, 1116, 1563,
 1578
Advanced treatment 1159
Advanced Wastewater Treatment
 1159
adverse effects 834, 961, 1118,
 1727
aeration 16, 186, 1185, 1266
aeration zone 337
Aerial colonization 1635
aerial insects 691
aerial pesticide 366
aerial photography 539, 1328
Aerial photography in watershed
 management---United States
 1703
aerobic sediments 1468
aerodynamic profile 916
Aeromonas 351
Aeromonas hydrophila
 (Aeromonadaceae): pathogen,
 waterborne 370
aerosol particles 1051
aerosol sorption 134
aerosols 149, 457
aesthetic value 711, 1785
afforestation 176, 225, 579, 1349
age 1270, 1317
age differences 692
age of soil 1533
agenda laden literature reviews
 1431
Ageniaspis citricola [brown citrus
 aphid] (Hymenoptera): pest
 235
aggregate stability 311
aggregates 677, 930, 1318, 1533,
 1643
aggregation stability 18
aging 200, 439
AGNPS model 1764
agricultural adjustment 479
agricultural byproducts 1470
agricultural chemicals 19, 20, 47,
 48, 75, 448, 681, 925, 970,
 1018, 1091, 1164, 1339, 1395,
 1412, 1576, 1585, 1653
Agricultural chemicals---
 Environmental aspects---
 Mexico, Gulf of 420
Agricultural chemicals---
 Environmental aspects---
 United States 561
Agricultural conservation 958
agricultural cropping 119
agricultural drainage 1158, 1635
Agricultural ecology 1623
Agricultural ecology---Technique
 159
Agricultural ecosystems 37
agricultural education 41, 514
agricultural effluent 613
agricultural fields 897, 1348
Agricultural & general applied
 entomology 183, 387, 422,
 477, 506, 754, 761, 949, 1074,
 1193, 1342, 1473, 1577, 1644,
 1659, 1707
agricultural irrigation 487
agricultural land 25, 43, 46, 52, 94,
 107, 123, 153, 155, 212, 273,
 295, 320, 341, 428, 464, 533,
 538, 929, 976, 990, 1018, 1096,
 1136, 1141, 1156, 1196, 1198,
 1241, 1268, 1357, 1386, 1421,
 1424, 1457, 1501, 1502, 1538,
 1571, 1622, 1718, 1759
agricultural land use 24
Agricultural lands 266
agricultural landscape 795
Agricultural landscape
 management---United States
 126
agricultural law 807, 827
Agricultural laws and legislation---
 United States 1420
Agricultural Machinery and
 Equipment 266
agricultural meteorology 1576
agricultural pesticide 853
Agricultural pests---Integrated
 control---United States 28
agricultural policy 40, 41, 43, 81,
 86, 320, 365, 451, 594, 679,
 807, 869, 1295, 1447, 1740
agricultural pollution 75, 390, 413,
 433, 494, 511, 833, 923, 1034,
 1220, 1445, 1469, 1638, 1645
Agricultural pollution California
 1330
Agricultural pollution---Economic
 aspects---United States 299
Agricultural pollution---
 Environmental aspects---
 United States 1582
Agricultural pollution---Handbooks,
 manuals, etc 632
Agricultural pollution---North
 America 283
agricultural practices 38, 201, 390,
 422, 427, 433, 761, 949, 1034,
 1248, 1342, 1577
agricultural production 49, 781,
 846, 1460, 1620
agricultural productivity 476
Agricultural products 266
agricultural research 163, 224,
 358, 679, 734, 1263, 1336,
 1365, 1550, 1564, 1637, 1667,
 1770, 1773
Agricultural Research Service 81

- Agricultural resources---United States---Management** 1420
- agricultural runoff** 29, 34, 80, 81, 295, 344, 372, 378, 390, 413, 494, 683, 923, 1012, 1049, 1076, 1117, 1124, 1147, 1159, 1301, 1340, 1358, 1388, 1462, 1469, 1579, 1581, 1645, 1695
- agricultural soils** 188, 453, 454, 464, 581, 695, 720, 947, 990, 1003, 1118, 1156, 1268, 1269, 1378, 1539, 1657, 1719
- agricultural sustainability** 31
- Agricultural systems** 1623
- Agricultural systems---Middle West** 1299
- Agricultural waste---South Dakota** 826
- agricultural wastes** 1, 32, 33, 34, 35, 86, 180, 258, 1084, 1085, 1154, 1579, 1663
- Agricultural wastes---Environmental aspects** 1806
- Agricultural wastes---Environmental aspects---Congresses** 879
- Agricultural wastes---Environmental aspects---United States** 57, 67, 241, 306, 430, 637, 791, 808, 872, 880, 1053, 1099, 1106, 1155, 1316, 1325, 1526, 1661
- Agricultural wastes---Management** 1632
- Agricultural wastes---Recycling---Environmental aspects** 790
- agricultural wastewater discharge** 1487
- Agricultural water supply** 460
- agricultural watersheds** 860, 1443, 1757
- Agriculture** 17, 20, 26, 36, 37, 38, 41, 45, 60, 92, 116, 128, 136, 160, 164, 212, 224, 264, 273, 278, 309, 324, 341, 377, 390, 449, 451, 459, 465, 499, 502, 518, 545, 552, 591, 594, 595, 604, 612, 614, 653, 668, 681, 783, 798, 803, 817, 829, 882, 931, 970, 971, 976, 986, 1006, 1034, 1076, 1124, 1130, 1152, 1153, 1189, 1196, 1216, 1236, 1248, 1346, 1359, 1364, 1365, 1389, 1409, 1535, 1559, 1560, 1576, 1579, 1592, 1600, 1609, 1619, 1620, 1627, 1644, 1660, 1668, 1686, 1714, 1734, 1764, 1804, 1808
- Agriculture---Environmental aspects** 958
- Agriculture---Environmental aspects---Developing countries** 482
- agriculture integrative approach** 53
- agriculture sustainability** 470
- agro ecosystem** 1725
- agrochemical** 1764
- Agrochemicals** 335, 511, 833, 1395, 1412, 1740
- Agroecosystem** 266
- agroecosystems** 278, 1552, 1622
- agroforestry** 50, 51, 52, 54, 61, 127, 507, 530, 591, 841, 911, 1452, 1477, 1540, 1667
- Agroforestry and land use changes in industrialized nations** 52, 54
- agroforestry: shelterbelt plantings** 1251
- agroforestry systems** 51, 54, 61, 127, 311, 530, 841
- Agroforestry systems---California** 857
- Agroforestry---United States** 1019
- Agronomy** 11, 136, 545, 829, 986, 1152, 1359, 1660, 1764
- Agronomy (Agriculture)** 31, 1285
- Agropyron cristatum (Gramineae): forage crop** 716
- AIDS** 351
- air** 394, 454, 677, 870
- air flow** 443
- air fugacity ratio** 134
- air microbiology** 12, 149, 691
- air pollutants** 454, 634, 932, 1005, 1399, 1400, 1653, 1690, 1789
- air pollution** 17, 40, 49, 58, 68, 93, 169, 198, 341, 353, 390, 423, 454, 455, 493, 585, 597, 645, 685, 728, 764, 787, 896, 898, 907, 932, 999, 1004, 1005, 1054, 1119, 1225, 1379, 1381, 1400, 1466, 1580, 1581, 1653, 1690
- Air pollution control** 493
- Air Pollution: Monitoring, Control & Remediation** 1004
- Air---Pollution---United States** 1148, 1149
- Air Pollution---Washington State---Columbia Plateau** 1810
- air quality** 58, 169, 277, 327, 787, 792, 1071, 1302, 1399, 1538, 1549, 1690, 1811
- air quality assessment**
- meterological modeling: dynamical models, four dimensional data assimilation** 896
- air quality management** 597
- air quality standards** 1772
- Air quality---Washington State---Columbia Plateau** 1810
- air soil interface** 135
- air surface exchange** 134
- air temperature** 443, 523, 997, 1225
- air toxics** 457
- air vegetation interface** 135
- air water interface** 135
- Alabama** 441
- alachlor** 833, 1135, 1324
- alachlor: biodegradation, herbicide** 152
- Alberta** 210, 1793
- Alces alces [moose] (Cervidae): bioindicator** 1725
- alcohols** 1677
- aldehydes** 1677
- Alfalfa---Diseases and pests---Control---United States** 698
- alfalfa hay** 409
- Alfalfa industry---United States** 698
- Algae** 59, 354, 368, 452, 551, 553, 814, 1110, 1418, 1575, 1607, 1618, 1649
- algae (Algae)** 354, 553, 814, 1649
- algae (Algae): filterable** 1618
- algae (Algae Unspecified)** 146
- Algae Ecophysiology** 59
- Algae---United States** 1704
- Algal blooms** 1464, 1575, 1757
- algal toxins: pollutant, toxin** 854
- algicides** 1448
- algorithms** 522
- alien plants** 669
- alkalinization** 1347
- alkane: pollutant** 93
- allelism** 729
- allelochemicals** 60, 231, 310, 1245
- allelopathins** 309
- allelopathy** 60, 309, 310, 1640
- alley cropping** 52, 54, 61, 127, 530, 552, 841
- alluvial deposits** 603
- Alluvial Rivers** 1226
- alluvial sediments** 24
- Alluvium---Measurement** 559
- alpha hexachlorochyclohexane: pollutant, toxin** 134
- alpha hexachlorocyclohexane** 1658
- alteration of flow** 1337, 1676
- Alternanthera philoxeroides** 1073
- Alternaria (Fungi Imperfecti or Deuteromycetes): H S toxins** 968
- Alternative agriculture---United States** 561
- alternative farming** 784, 970
- alternative stable states** 449
- altitude** 1349, 1427
- aluminium** 1785
- aluminum** 585, 719
- aluminum hydrous oxides** 581
- aluminum sulfate** 1181, 1302
- ambrysus amargosus** 271
- amended soils** 1161
- amenity and recreation areas** 1427
- American avocet** 1469
- American Beaver** 598
- American coot** 1469
- amino acid enantiomers** 986
- amino acid nutrition** 1475
- amino acid racemization** 986

Subject Index

- amino acids: feed additive,**
synthetic 446
amino sugars 986
ammonia 8, 26, 56, 66, 68, 70, 72,
104, 294, 414, 423, 481, 486,
652, 676, 847, 893, 950, 984,
990, 993, 1000, 1044, 1191,
1229, 1240, 1302, 1381, 1382,
1399, 1400, 1402, 1415, 1563,
1675, 1720
Ammonia as fertilizer 248
ammonia deposition 131
ammonia emission 983, 1359
Ammonia emissions 69, 131, 446
Ammonia---Environmental aspects
1370
Ammonia---Physiological effect
248
ammonia: pollutant 131, 532
ammonium 719, 899, 1002, 1281
ammonium nitrogen 917, 1281
Amphibia 88, 216, 442, 1101, 1228,
1233, 1317
amphibian conservation 520
Amphibians 442, 1233
Amphibians---United States 1705
Amphibiotic species 1638
amylases 479
anaerobes 1790
anaerobic conditions 941
anaerobic digesters 1052, 1293
anaerobic digestion 13, 32, 74, 180
anaerobiosis 453
analytical chemistry 78
analytical method 469, 571, 662,
764, 1056, 1289, 1514, 1574,
1593, 1654
analytical methods 168, 326, 347,
349, 558, 662, 922, 1134, 1182,
1290, 1294, 1563, 1580, 1588,
1648
Analytical procedures 511, 666
Analytical techniques 75, 167, 339,
347, 511, 1516
Anas platyrhynchos 1469
anatidae 862
ANE, Baltic Sea 222
ANE, North Sea 222
Angiospermae (Angiospermae)
116, 502, 1153, 1714, 1768
angiosperms 6, 115, 116, 128, 176,
177, 179, 234, 235, 254, 257,
275, 282, 319, 407, 473, 502,
530, 537, 589, 613, 627, 641,
643, 652, 667, 669, 677, 700,
701, 716, 724, 785, 788, 823,
849, 850, 852, 855, 908, 952,
1077, 1089, 1153, 1192, 1200,
1219, 1264, 1298, 1312, 1367,
1427, 1482, 1483, 1496, 1602,
1604, 1619, 1640, 1673, 1692,
1714, 1752, 1768, 1785
Anguilla anguilla 1135
animal (Animalia) 665, 1594
animal (Animalia): aquatic,
terrestrial 1431
animal (Animalia): filter feeders
1618
animal (Animalia Unspecified)
576, 595, 662
animal ecology 665, 815
animal feeding 56, 843, 1497
Animal feeding---Economic
aspects---United States 299
Animal feeds 1735
animal housing 294, 455, 1229,
1381, 1382
animal husbandry 257, 971, 1103,
1486, 1675
Animal industry---Environmental
aspects 261
Animal industry---Waste disposal---
United States 859
animal manure 1064
animal manure management 80,
81, 86, 624, 625, 820, 884,
1071, 1252
animal manures 16, 73, 82, 83, 85,
86, 142, 180, 371, 375, 464,
483, 486, 540, 548, 673, 682,
720, 726, 825, 827, 865, 882,
884, 893, 899, 917, 929, 947,
1001, 1028, 1044, 1054, 1065,
1156, 1229, 1246, 1252, 1258,
1281, 1381, 1382, 1402, 1412,
1572, 1628, 1683
animal nutrition 82, 810, 1028,
1038, 1044
Animal nutrition---Congresses
1035
animal pests 197
animal physiology 1516, 1737
Animal & Plant Science 311
Animal Populations 442
animal production 68, 80, 409,
414, 787, 950, 1044, 1203, 1229
animal tissue 1613
animal tissues 1651, 1706
Animal waste 819, 828
Animal waste---Economic aspects---
United States 299
Animal waste---Environmental
aspects 84, 883, 1105, 1806
Animal waste---Environmental
aspects---Congresses 879
Animal waste---Health aspects 842
Animal waste---Management 84,
284, 285, 733, 842
Animal waste Netherlands---
Management---Methodology
1370
Animal waste---North Carolina---
Management 360
Animal waste---Recycling 828
Animal waste---South Dakota 826
Animal waste storage and
treatment facilities 69
Animal waste---United States---
Management 859
Animal waste---United States---
Management---Methodology
1370
animal wastes 8, 34, 35, 83, 85,
149, 228, 252, 359, 372, 414,
451, 483, 534, 831, 835, 1037,
1038, 1044, 1104, 1240, 1297,
1409, 1412, 1485, 1513, 1563,
1683
Animalia (Animalia Unspecified)
146, 397, 576, 595, 662, 851
animals 49, 55, 88, 102, 104, 113,
118, 165, 166, 168, 177, 182,
202, 204, 216, 219, 220, 234,
235, 252, 303, 321, 348, 350,
354, 370, 376, 397, 446, 463,
466, 468, 504, 541, 553, 558,
560, 576, 595, 630, 662, 665,
667, 691, 701, 727, 728, 729,
755, 758, 764, 766, 783, 789,
801, 803, 814, 823, 850, 851,
863, 876, 881, 910, 914, 948,
968, 969, 983, 984, 1006, 1052,
1088, 1094, 1097, 1103, 1107,
1109, 1123, 1187, 1191, 1197,
1207, 1208, 1251, 1255, 1270,
1285, 1297, 1303, 1304, 1352,
1396, 1399, 1406, 1422, 1429,
1431, 1463, 1475, 1484, 1485,
1487, 1494, 1520, 1552, 1587,
1590, 1594, 1604, 1618, 1619,
1635, 1639, 1649, 1671, 1673,
1693, 1700, 1706, 1711, 1725,
1736, 1741, 1772, 1807, 1808
animals (Animalia Unspecified)
397
anionic species 581
Annelids 354, 814
annelids (Annelida) 814
annual mean rainfall 1487
annuals 14, 769, 1768
Anoxic conditions 222, 900, 1581
Anser canagicus 1469
ANSWERS model 1764
anthropogenic contaminant
distribution 764
anthropogenic disturbances 630
Anthropogenic factors 1638
anthropogenic impact 1554
anthropogenic processes 1347
antibacterial agents 1152
antibiotic resistance: plant
pathogens 90
antibiotic use 90
antilopina americana 1727
antimicrobial resistance 1152
antinutritional factors 244
ANW, USA, Chesapeake Bay 339
aphid (Homoptera) 691
aphid mummies 1387
aphididae 691
aphidoidea 563, 1387
APHIS Wildlife Services program
1808
Aphthona czwalinae (Coleoptera):
biological control agent, flea
beetle 177

- Aphthona lacertosa (Coleoptera):**
 biological control agent, flea beetle 177
- Aphthona nigriscutus (Coleoptera):**
 biological control agent, flea beetle 177
- apiculture 1406
- Appalachian States of USA** 6, 436, 788
- apples 741, 849
- application 1001, 1367, 1529, 1681, 1813
- application date 66, 991, 1060, 1112, 1344, 1717
- application equipment 548
- application methods 444, 640, 726, 820, 1002, 1083, 1344, 1529
- application rates 30, 66, 394, 445, 478, 549, 719, 726, 776, 786, 855, 947, 991, 995, 997, 1002, 1060, 1174, 1234, 1344, 1355, 1458, 1549, 1564
- application season 133
- application to land 30, 142, 203, 229, 252, 428, 483, 673, 827, 835, 865, 874, 881, 955, 1037, 1046, 1102, 1104, 1195, 1209, 1302, 1324, 1529
- applications 1371, 1629, 1691
- applied and field techniques 90
- applied entomology 675
- applied microbiological test parameters 915
- APS model** 160
- Aquaculture** 1184, 1205, 1448, 1808
- aquatic animals 130, 1396, 1469, 1638
- aquatic biology 166
- aquatic biota evolution 809
- aquatic birds 37, 1373, 1469
- aquatic communities 107, 247, 565, 1450, 1700
- aquatic conservation 1451
- Aquatic ecology---Environmental aspects---United States** 1283
- Aquatic ecosystems** 78, 565, 598, 1296, 1487, 1507
- aquatic ecosystems: topographical uniqueness** 809
- Aquatic entomology** 148, 1421, 1461
- Aquatic environment** 3, 4, 109, 130, 164, 247, 412, 432, 434, 494, 565, 649, 683, 721, 1090, 1128, 1395, 1403, 1464, 1516, 1530, 1580
- aquatic environments** 247, 432, 722, 910, 1305, 1651, 1700, 1718
- Aquatic food web** 146
- aquatic foodchain** 480
- Aquatic Habitats** 339, 649
- aquatic herbicides: environmental effects, fate, modes of action** 1361
- aquatic insects** 175, 271, 343, 431, 1638
- aquatic invertebrate (Invertebrata)** 553
- aquatic invertebrates** 88, 343, 712, 1700
- Aquatic invertebrates---Environmental aspects---United States** 355
- Aquatic Life** 434, 683
- aquatic macrophyte (Plantae)** 1347
- Aquatic macrophytes** 1159, 1468
- Aquatic mammals** 598
- Aquatic microorganisms** 1395, 1650
- aquatic organism (Organisms)** 630
- aquatic organisms** 130, 148, 162, 683, 721, 910, 961, 1101, 1150, 1360, 1450, 1650, 1700
- Aquatic organisms, Effect of contaminated sediments on---United States** 1283
- Aquatic organisms Effect of water pollution on---United States** 1143
- Aquatic phase** 1635
- aquatic plant control** 1397
- aquatic plants** 339, 973, 1073, 1159, 1180, 1413, 1418, 1510, 1735, 1785
- aquatic productivity** 1094
- Aquatic reptiles** 1597
- Aquatic resources conservation---United States** 1283
- Aquatic sciences** 222, 1397, 1468
- aquatic sediments** 814
- aquatic soils** 108, 110
- aquatic systems** 1649
- Aquatic Weed Control** 1073
- aquatic weed (Plantae): biology, ecology, invasive, management research, physiology** 1361
- aqueous solutions** 661
- Aquifer Characteristics** 1314
- aquifer sediments** 1660
- aquifers** 15, 20, 246, 1046, 1049, 1135, 1314
- arable land** 105, 212, 945
- arable landscapes** 390
- arable soils** 899
- arable systems** 1374
- Araneae** 118, 422, 689, 1473, 1494, 1587
- arbuscular mycorrhiza (Phycomycetes)** 114
- arbuscular mycorrhizae (Phycomycetes): symbiont** 115
- arcelins: insecticide** 1177
- Archaeobacteria** 1303
- arctic nival** 498
- areas** 1278
- arid ecosystems: degradation, restoration** 449
- arid environments** 1579
- arid lands** 320, 1239, 1288, 1727
- arid regions** 44, 522, 1487, 1739
- Arid regions agriculture** 22
- arid zones** 15, 63, 888
- aridity** 781
- Aristida beyrichiana [wiregrass] (Gramineae): nontarget organism** 641
- Aristida stricta [wiregrass] (Gramineae): nontarget organism** 641
- Arizona** 584, 1205, 1433, 1752
- Arkansas** 1046, 1759
- Arnica Montana I** 423
- aromatic hydrocarbons** 1362
- Artemisia spp** 176
- Artemisia spp. [sagebrush] (Compositae)** 823
- Artemisia tridentata** 176
- Artemisia tridentata (Compositae)** 669
- arthropod (Arthropoda): biological control agent** 755
- arthropod (Arthropoda): pest** 220
- arthropod control** 220
- arthropod pests** 265, 563, 758, 1206, 1590
- Arthropoda** 183, 761
- Arthropoda (Arthropoda Unspecified)** 766, 1285
- arthropods** 49, 118, 154, 168, 177, 202, 216, 220, 234, 235, 272, 466, 667, 691, 727, 728, 729, 730, 755, 758, 814, 823, 968, 1232, 1285, 1406, 1463, 1494, 1552, 1587, 1590, 1619, 1635, 1649, 1671, 1673, 1693, 1807
- arthropods (Arthropoda Unspecified)** 766
- artificial selection** 310, 1033
- artificial wetlands** 287, 292, 344, 920, 964, 973, 1159, 1368, 1615, 1785
- Artiodactyls** 104, 446, 803, 850, 948, 983, 984, 1303, 1475, 1725
- arundo donax** 398
- aschelminthes (Helminthes)** 814
- Aschelminths** 766, 1107
- asexual reproduction** 398
- Asia** 222, 510, 1046, 1089, 1174
- aspartic acid** 986
- assay** 666, 1358
- assessment** 88, 120, 123, 124, 127, 343, 466, 539, 712, 734, 907, 945, 1276, 1553, 1566, 1647
- Assessments** 666, 816, 1379
- ASW, Mexico Gulf** 222
- ASW, USA, Gulf Coast** 1581
- atmosphere** 58, 634, 701, 886, 900, 932, 1051, 1066, 1172, 1240, 1563, 1675
- Atmospheric carbon dioxide---United States** 771
- Atmospheric chemistry** 900, 1004

Subject Index

- Atmospheric chemistry---**
Technique 159
atmospheric deposition 1347, 1348
Atmospheric deposition---United States 1148
Atmospheric diffusion---United States 1149
atmospheric dispersion 133
atmospheric fallout 674
Atmospheric gases 900
atmospheric lifetimes 1658
atmospheric reaeration 1369
atmospheric removal rates 1658
atmospheric science 916
atmospheric transport 131, 134, 135
Atrazine 683, 833, 1135, 1650
atrazine: endocrine disrupting pesticide 352
atrazine: herbicide, pollutant, toxin 133
atrazine: herbicide, toxin, pollutant 134
attitudes towards wolves 1270
Australia 356, 369, 627, 784, 856, 1119, 1120, 1201, 1239, 1271, 1298, 1337, 1456, 1477, 1519, 1684
automated sampling 136
automation 246
Autotrophy 1418
availability 383, 1161, 1718
available water 300
avenacins: fungicides 968
Aves 37, 367, 424, 848, 895
Aves (Aves Unspecified) 1635
aviation 1808
azotobacter 1488
azoxystrobin: environmental safety, fungicide, mode of action, risk, strobilurin, synthesis 1603
Bacillariophyceae 565
bacillus licheniformis 1293
bacillus thuringiensis 479, 495, 1341, 1512, 1659
Bacillus thuringiensis Bt gene (Endospore forming Gram Positives) 1673
Bacillus thuringiensis (Endospore forming Gram Positives) 1807
Bacillus thuringiensis (Endospore forming Gram Positives): biocontrol agent, entomopathogen 729
Bacillus thuringiensis (Endospore forming Gram Positives): pest 1177
Bacillus thuringiensis entomotoxic proteins 1177
Bacillus thuringiensis toxins: insecticide, toxin 1807
bacteria 90, 186, 298, 322, 336, 347, 350, 370, 376, 452, 541, 553, 670, 681, 697, 729, 814, 851, 894, 909, 910, 969, 1078, 1103, 1107, 1177, 1201, 1278, 1303, 1384, 1418, 1461, 1607, 1618, 1619, 1650, 1662, 1694, 1728, 1743, 1807
bacteria (Bacteria) 336, 553, 814
bacteria (Bacteria): decomposer, xenobiotic degrading microorganism 670
bacteria (Bacteria): filterable 1618
bacteria (Bacteria General Unspecified) 851, 1619
bacteria (Bacteria): pathogen 1107
bacteria (Bacteria): pathogen, waterborne 370
bacteria (Bacteria): pollution indicator 350
bacterial diseases 376
bacterial persistence 1660
bacterial populations 1278
bacterial toxins 479
bacteriological quality 1072
bacteriophage 139
bacteriophages 139
Bacteroides fragilis 372
Bald eagle 424
bank erosion 890
bank stabilization 1451
barley 409
barn wastewater 292
Bartramia longicauda 424
base saturation 226, 1561
Baseline studies 1435, 1493
basic ecological principles: effective implementation challenges, effective implementation opportunities 809
Basidiomycetes (Fungi Unspecified) 1479
Basins 833, 1100
BASINS---Computer program 1080
Basins---Geology 420
battery husbandry 30
Bayesian Methods 141
Bayesian theory 1096
Bays 222
beauty perceptions 1625
beauveria bassiana 238
Beavers 598
bed load transport 1315
bed topography 801
bedform stability 1509
beef cattle 203, 219, 409, 1191
beef cattle (Bovidae) 803
beef systems 1374
behavior 167, 397
Behavior and fate characteristics 34, 109, 112, 263, 544, 833, 919, 920, 928, 934, 1015, 1076, 1162, 1358, 1379, 1445, 1580, 1581, 1782
behavioral responses 166
Behaviour 167
benchmarks 1507
beneficial arthropods 238, 758
beneficial insects 212, 976
beneficial organisms 117
beneficial use 1337
benefit cost analysis 1729
benefit drawback analysis 143
Benefits 685
benthic fauna 110
benthic flora 110
benthic habitats 630
benthic infauna (Organisms) 122
benthic production 1618
Benthos 110, 343, 565, 1648, 1670
benzoic acid pesticides: determination, extraction, pollutant 1613
best management practice 710
best management practices 43, 80, 81, 521, 726, 1018, 1197, 1443, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1645
Best management practices (Pollution prevention) 958, 1438
beta vulgaris 1488
bibliographies 433
Bifidobacterium 372
big sagebrush 669
binding 123, 439, 1578, 1702
binding sites 1578
bioaccumulation 78, 130, 148, 721, 1093, 1186, 1507, 1648, 1650, 1735
bioaccumulation processes 480
Bioassay 137, 167, 435
bioassays 137, 166, 168, 170, 666, 1128, 1201, 1522, 1648
bioavailability 130, 439, 692, 1198, 1371, 1578, 1652
biobusiness 45, 257, 278, 1463, 1619
biocatalysts 1694
biochemical oxygen demand 1369
biochemical pathways 1125, 1591
biochemical properties 1536
biochemistry 501, 511, 867, 1469, 1517
Biochemistry---Congresses 1449
biocides 602
Bioclimatology---Technique 159
BioCycle 258
biodegradation 2, 47, 73, 123, 186, 287, 336, 410, 439, 501, 618, 620, 985, 1030, 1078, 1131, 1134, 1202, 1294, 1318, 1395, 1470
biodiversity 88, 99, 120, 153, 155, 216, 224, 271, 272, 377, 384, 390, 433, 520, 538, 576, 592, 634, 652, 653, 668, 690, 701, 712, 722, 768, 795, 801, 809, 815, 856, 931, 943, 1118, 1172, 1250, 1317, 1352, 1355, 1424, 1450, 1456, 1467, 1487, 1584

- biodiversity (contd.)** 1639, 1647, 1718, 1725
biodiversity patterns 1451
bioenergy 81, 180, 464, 1085
Bioengineering 194
Bioengineering---West---United States 1701
bioethics 250
biofilms 1078, 1607
biofilters 1052
Biofiltration 1358
biogas 73, 74, 180, 1735
biogeochemical conditions 100
Biogeochemical cycle 339, 900, 1162, 1782
biogeochemical cycles 59, 1352, 1720
biogeochemical cycling 674
biogeochemical processes 801
biogeochemistry 20, 160, 339, 722, 794, 809, 936, 942, 1030, 1162, 1391, 1766, 1782
Biogeochemistry---Technique 159
Biogeomorphology of terrestrial and freshwater systems 303
biographies 1058
Bioindicators 139, 162, 347, 349, 511, 799, 919, 1469, 1516
bioinsecticides 743
biointensive pest management 1465
biological activity in soil 5, 200, 483, 540, 722, 917, 1000, 1020, 1522, 1543, 1556, 1790
biological communities 1296
Biological control 12, 163, 173, 196, 235, 238, 250, 265, 310, 387, 593, 595, 615, 678, 741, 744, 747, 754, 758, 976, 1073, 1193, 1199, 1254, 1285, 1463, 1473, 1619, 1707, 1769, 1770
biological control agent 1619
biological control agents 173, 196, 197, 212, 325, 741, 747, 1199, 1341, 1576, 1629, 1681
Biological diversity 390, 949, 1282, 1516
Biological diversity conservation 1678
Biological diversity conservation---United States 161, 763
biological diversity: sustenance 1625
biological effects 165, 166
biological filtration 997
biological indicators 88, 107, 120, 182, 212, 341, 343, 592, 645, 712, 944, 945, 1172, 1201, 1453, 1515, 1555, 1690, 1693, 1700
biological interactions 814
biological invasions 667
biological pest control methods 172
biological processes 630
biological production 600
Biological Properties 184
biological quality 674
biological responses 1476
Biological sampling 511
biological tissue 764
biological tissues 1614
biological treatment 73, 158, 985
Biology 32, 89, 175, 266, 466, 817, 1072, 1511
biomanipulation 1212, 1468
Biomarkers 511
biomass 47, 170, 215, 453, 1085, 1185, 1394, 1457, 1691
biomass depletion 449
biomass production 361, 488, 523, 757, 1276, 1394
biomass related microbial activities 915
biomonitoring 1179
Bioprocess Engineering 528, 1364
Bioreactors 186
bioremediation 186, 188, 336, 361, 363, 529, 1125, 1167, 1169, 1202, 1324, 1362, 1391, 1578, 1696
biosafety 479
biosolids 192, 348
biosphere 728
biota 167, 565, 721, 722, 1090, 1305, 1676
biotechnology 2, 12, 74, 173, 180, 195, 198, 501, 595, 1073, 1671, 1735
biotic component management 1554
Biotic factors 184
biotic integrity 368, 943
biotic transformations 480
biotopes 105, 732
biphenyls 230, 789
bird (Aves) 560
bird (Aves): community response, landscape variables 1251
bird (Aves): pest 1808
bird (Aves Unspecified) 1207
birds 37, 88, 204, 216, 367, 424, 427, 446, 560, 667, 717, 795, 823, 848, 895, 1187, 1197, 1207, 1208, 1251, 1319, 1373, 1399, 1475, 1635, 1639, 1706, 1711, 1741, 1808
birds (Aves Unspecified) 1635
Birds, Protection of 1777
bivalves (Pelecypoda) 814
black box rates 794
Black necked stilt 1469
Black Rosy finch 424
black tern (Charadriiformes) 667
blood 1469, 1737
BMP 710
BMPs 43, 80, 81, 327, 1197, 1500, 1501, 1502, 1503, 1504, 1505, 1506
body fat 409
body morphology 701
body protein 409
Body size 1343
body water 1737
body weight 409, 1737
bog plants 588, 1180
bogs 1800
boreal forests 1492, 1634
botanical composition 117, 484, 693, 757, 821, 1045, 1172, 1349, 1708, 1789
Bottle brush tree 1073
bottom sediment composition 674
Bottom Sediments 108, 1383, 1464
Bottom topography 1724
bottomland forests 1350
bottomland hardwood wetlands 1176
bound amino acids 423
bound residues 200
boundary layer 1509
Bovidae 219, 252, 303, 876, 881, 1191, 1255, 1297, 1422, 1429, 1485, 1520, 1604
Bovidae (Bovidae) 850, 948
Brackish water 339, 431, 1015, 1739
Brackishwater pollution 1581
Brassica 677
Brassica chinensis [Chinese whitebage] (Cruciferae): vegetable crop 254
brassica napus 677, 1488
Brassica napus [canola] (Cruciferae): oil crop 115
Brassica sp. (Cruciferae) 613
Brazil 369
breeding birds 201
breeding places 1357
Breeding sites 37, 1233
Breeding success 442
Brest, France 605
Britain 1635
British Columbia 125, 563, 1315, 1698
British Isles 170, 202, 206, 322, 882, 1194, 1243, 1255, 1367, 1368, 1548
Brittany 1096
broadcasting 1156, 1345
broiler chicken (Galliformes) 1197
broiler production 1302
broilers 203, 204, 418, 692, 1208, 1399
broken leg model 1431
brominated flame retardant: pollutant 93
bromus tectorum 769
brood parasitism 1319
brook valley meadows 1348
browsing 579, 757
Bryophytes 659
Bt toxin 1673
budgets 1485
buffer strips 1645
buffer zones 52, 54, 127, 205, 492, 530, 936, 988, 1116, 1117

Subject Index

- Buffer zones---Ecosystem management** 1438
- Buffer zones---Ecosystem management---Chesapeake Bay---Md and Va---Handbooks, manuals, etc** 233
- Buffer zones---Ecosystem management---Georgia** 1407
- Buffer zones---Ecosystem management---United States** 1320
- Buffers** 1645
- bulk density** 275, 677, 719, 1025, 1165, 1266, 1304, 1385
- bumblebees (Hymenoptera): adult, nontarget organism** 1406
- burning** 212, 278, 1085
- Buteo regalis** 424
- Butterflies** 1193, 1726
- Butterflies---Great Plains---Ecology---Handbooks, manuals, etc** 836
- Butterflies---Great Plains---Effect of habitat modification on---Handbooks, manuals, etc** 836
- butterfly metapopulation** 512
- by product identification** 1114
- Byproducts** 1115
- Cadmium** 148
- CAFOs** 80, 86
- Cajuput tree** 1073
- calcium** 64, 418, 692, 1154, 1258
- calcium carbonate** 215, 585
- calcium ions** 719
- calcium oxide** 1181
- calibration** 138
- Calicivirus** 452
- Calicivirus (Caliciviridae): disinfection resistance, pathogen** 370
- California** 44, 188, 398, 539, 584, 1205, 1332, 1380, 1682
- California Nevada** 521
- callipepla** 1727
- calving rate** 409
- Campylobacter** 1103, 1757
- Canada** 26, 125, 275, 341, 589, 668, 830, 961, 964, 991, 1038, 1076, 1090, 1103, 1194, 1200, 1248, 1363, 1379, 1403, 1409, 1689, 1814
- canals** 1286, 1310
- Canis [wolf] (Canidae)** 1270
- canola (Cruciferae)** 613
- canopy** 174, 216, 318, 715, 1081
- canopy surface topology** 812
- capacity** 102
- Cape Fear** 714
- Capreolus capreolus (Cervidae): bioindicator, deer** 1725
- capsicum annuum** 705, 735
- Capsicum annuum [Chinese whitebage] (Solanaceae): vegetable crop** 254
- carabidae** 212
- Carbamate compounds** 4, 511
- carbamate insecticides (detection of pollutants) dithiocarbamate fungicides (detection of pollutants) imidazolinone herbicides (detection of pollutants) organophosphorus insecticides (detection of pollutants) pesticides (detection of pollutants) sulfonylu** 190
- Carbamate Pesticides** 4
- carbamate: pollutant** 1253
- Carbofuran** 542
- carbon** 213, 214, 278, 421, 425, 464, 483, 484, 785, 898, 1318, 1338, 1347, 1404, 1416, 1479, 1522, 1539, 1556, 1627, 1642
- carbon cycle** 213, 215, 225, 226, 425, 484, 602, 1404, 1539, 1627
- carbon dioxide** 49, 91, 215, 277, 341, 473, 478, 481, 523, 604, 652, 735, 1172, 1338, 1347, 1627
- carbon dioxide enrichment** 523
- carbon dioxide: greenhouse gas** 614
- carbon dioxide: greenhouse gas, pollutant** 1189
- carbon monoxide: natural emissions, pollutant** 967
- carbon:nitrogen ratio** 785, 899
- carbon sequestration** 275, 1189, 1200, 1410, 1519, 1539, 1592
- carcinogen** 230
- carcinogenesis** 834
- carcinogenicity** 1476
- Carcinogens** 113
- Carnivores** 1270
- carrot: vegetable** 1655
- carya illinoensis** 325
- CASC2D model** 1764
- case reports** 1782
- case studies** 577, 607, 691, 784, 815, 1005, 1263, 1500, 1501, 1502, 1503, 1695, 1782
- Case study** 1695
- case study data** 785
- cash crop residues: application timing, mineralization rates, nitrogen content, soil incorporation** 785
- castor** 333, 598
- Castor canadensis** 598
- Castor fiber** 598
- catabolism** 1728
- catalysis** 100
- catchment acidification** 1347
- Catchment area** 799, 1495
- catchment areas** 936, 1116, 1124, 1363
- catchment basins** 1495
- catchment health indicators** 356
- catchment hydrology** 301, 526, 933, 1039, 1096, 1311, 1774
- catchment scale processes** 809
- catchment systems** 736
- catchments** 1116, 1124, 1487
- cation exchange capacity** 226, 719, 1240
- cations** 418
- Catoptrophorus semipalmatus** 1469
- cattle** 210, 219, 252, 303, 353, 609, 876, 881, 1072, 1191, 1255, 1297, 1422, 1429, 1485, 1604
- cattle (Bovidae): dairy animal, female** 104
- cattle dung** 534, 1191, 1195
- cattle feeding** 219
- cattle manure** 72, 198, 252, 329, 534, 864, 874, 1020, 1046, 1103, 1195, 1416, 1518, 1702, 1743
- Cattle Manure---Saskatchewan** 889
- cattle slurry** 259, 417, 534, 1195, 1518, 1743
- cauliflower: vegetable** 1655
- cell aging** 986
- cell fragment removal** 531
- centaurea diffusa** 769
- centaurea maculosa** 769
- centaurea solstitialis** 769
- central Europe** 798, 1789
- Central Gulf coastal plain** 234
- central Ohio** 7
- Centrocercus urophasianus [sage grouse] (Galliformes)** 823
- cereals** 153, 156, 677, 692, 991, 1642
- Chaetomium globosum (Ascomycetes)** 152
- chains** 1708
- channel flow velocity** 1096
- channel instability** 654
- channel morphology** 421, 890, 1315
- channel movements** 694
- channeling** 227
- channelization** 227, 1451
- channels** 345, 558, 890, 1092, 1226
- Channels---Hydraulic engineering--Canada** 966
- characteristics** 228, 1677
- Characteristics, behavior and fate** 413, 494, 924, 1117, 1314, 1395, 1464
- Characterization** 32, 359, 534
- charcoal** 425, 695
- checklists** 1357, 1555
- Chelicerates** 814, 1635
- Chemical analysis** 75

- chemical assessment techniques:**
background enrichment,
bioavailability, grain size
effects, interstitial water
chemistry, sediment quality
values 122
- chemical bonding** 200
- chemical composition** 20, 58, 953,
1029, 1517, 1595
- chemical control** 183, 593, 741,
1342, 1767, 1768
- chemical degradation** 1046, 1115
- Chemical extraction** 75
- chemical fate** 276
- chemical interactions** 814
- chemical kinetics** 544
- chemical monitoring** 1179
- Chemical pollutants** 130, 494,
1343
- Chemical pollution** 130, 442, 494,
511, 923, 1090, 1167, 1343,
1403
- chemical precipitation** 215, 1368,
1448
- Chemical processes** 263, 630, 942,
1030, 1162
- chemical properties** 7, 311
- Chemical Reactions** 4, 32, 167,
719, 1209, 1658
- chemical recovery** 1296
- chemical residues** 1259
- chemical structure** 231, 1125, 1294
- chemical: transport** 276
- chemical transport distance** 134
- Chemical treatment** 1528
- chemicals** 130, 728, 1090, 1385,
1403, 1448
- Chemicals (corrosion)** 1121
- Chen canagica** 1469
- Chesapeake Bay** 327, 577
- Chesapeake Bay Watershed** 1745
- Chesapeake Bay Watershed---Md
and Va** 564, 1428
- chicken (Galliformes)** 1207
- chicken (Galliformes): broiler,
chick, commercial species,
layer, livestock** 446
- chickens** 244
- China** 510
- chiral OC pesticides: enantiomers,
pesticide, toxin, volatilization,
pollutant** 134
- chironomidae** 1648
- chironomids (Diptera)** 1635
- Chironomus tentans** 1648
- chiroptera** 1727
- chitinases: insecticide** 1177
- chloralose** 662
- chloride** 1002, 1490
- chlorinated hydrocarbons** 1093
- Chlorination** 635
- chloroacetanilides** 152
- Chlorofluorocarbons** 493
- chlorophyll** 170
- chlorophyll: monitoring** 1692
- chloropicrin** 1658
- chlorothalonil: fungicide, pollutant,
toxin** 134
- chlorpyrifos** 247
- chlorpyrifos: insecticide, pollutant,
toxin** 134
- chlorpyrifos: insecticide,
quantitative analysis** 78
- cholinesterase** 1809
- chordates** 55, 102, 104, 113, 146,
165, 166, 446, 463, 468, 504,
560, 630, 667, 701, 764, 783,
789, 803, 814, 823, 850, 863,
914, 948, 983, 984, 1006, 1052,
1094, 1109, 1123, 1197, 1207,
1251, 1270, 1303, 1352, 1475,
1487, 1618, 1635, 1639, 1725,
1772, 1808
- Chromatographic techniques** 75
- Chromatography (Liquid)** 75
- Ciconiiformes** 1706
- circadian rhythm** 1737
- Circulation** 525
- cis 1,3 chloropropane** 1658
- citizen participation** 43, 577, 1259
- Citronelle ponds** 234
- citrus (Rutaceae): tropical
subtropical fruit crop** 235
- Civil** 939
- Civil Engineering** 345, 1758
- Clarity** 1670
- Classification** 824, 1493
- Classification systems** 1413, 1493,
1634
- clasts** 1315
- Clay** 3
- clay crystals: physical layered
structure** 1618
- clay fraction** 867, 1549
- clay soils** 677, 1257
- Clays** 3
- clays: chemical properties,
physical properties** 1618
- Clean Water Act** 1453, 1504, 1505,
1506
- Clean Water Act of 1972** 1759
- Clean Water Action Plan** 863
- clearcutting** 1317
- climate** 91, 275, 340, 602, 685, 809,
964, 1318, 1366
- climate change** 7, 24, 141, 238,
525, 614, 794, 1006, 1307
- climate cycles** 1094
- climate variability** 24, 1307
- climate variation** 863
- climatic change** 49, 58, 333, 464,
474, 475, 523, 629, 811, 899,
1172, 1225, 1338, 1446, 1576
- Climatic Changes** 685, 900, 1004
- Climatic conditions** 184, 225
- climatic factors** 66, 92, 140, 971,
1576
- climatic oscillation** 449
- climatic regimes** 806
- climatic zones** 341, 1225
- climatology** 45, 141
- Climatology (Environmental
Sciences)** 240
- climax vegetation** 823
- clones** 361
- Clostridium (Endospore forming
Gram Positives)** 1384
- clover (Leguminosae)** 850
- CO2 emissions** 7
- coagulants** 1448
- coal combustion** 1675
- Coal mine waste---Handbooks,
manuals, etc** 632
- coarse organic matter** 701
- coarse textured soils** 993, 1519
- coastal areas** 1066, 1122, 1180,
1481
- Coastal environments** 1630
- coastal erosion** 812
- coastal eutrophication** 605
- coastal plain** 714
- coastal plains** 497, 1378
- Coastal plants---Southern States---
Identification** 555
- Coastal plants---Southern States---
Pictorial works** 555
- coastal regions** 665
- Coastal states** 222
- coastal water** 236, 1401
- coastal waters** 133, 222, 339, 605,
934, 1072, 1098, 1287, 1401,
1581
- Coastal zone** 339
- coastal zone management** 1401
- coefficient** 1369
- coevolution** 776
- cold regions** 134
- Coleoptera (Coleoptera)** 1635
- Coliforms** 351
- coliforms (Enterobacteriaceae):
pollution indicator** 350
- collaborations** 1361
- Colloids** 3
- colonization** 212, 399, 589, 1243
- colonization rates** 1347
- color** 907, 1281, 1327
- Colorado** 138, 768, 1715
- column nitrate enrichment** 714
- combustion** 13, 457
- cometabolism** 336
- commercial hybrids** 479
- commercial samples** 906
- communities** 120, 170, 773, 784,
976, 1378
- Community composition** 334, 390,
683, 689, 1630, 1634
- community ecology** 155, 175, 399,
588, 681, 1232, 1790, 1802
- community forestry** 773, 1667
- community involvement** 530
- Community structure** 683, 1343,
1672
- Community Studies** 37, 1098
- Comparison Studies** 263, 1271
- comparisons** 170, 1367
- compensatory mitigation** 520
- competition** 1496, 1635

Subject Index

- competitive ability** 163, 398, 1009
complexity 1496
Compliance 1379
Composition of water 1162
compost 255, 260, 261, 556, 860, 883, 1048, 1214, 1364, 1499
compost co-utilization 513
Compost---Economic aspects 258, 535
Compost---Handbooks, manuals, etc 557
Compost---Management 535
Compost---Saskatchewan 515
compost utilization 254
composted manure 917
composted material toxicity 410
composters 1702
composting 13, 32, 33, 191, 257, 259, 359, 509, 873, 1102, 1165, 1364, 1528, 1702
composts 142, 256, 359, 509, 784, 917, 1025, 1165, 1702
composts: disease suppressive effects 1254
computer applications 928, 1334
computer language 528
Computer models 1377
Computer programs 1377
computer simulation 926, 933, 940, 998, 1562, 1775
computerized technique 528
computers 1334
concentrated animal feeding operations 80, 86, 1252, 1759
concentration 428, 961, 1563, 1677
conceptual challenges 794
conceptual models 1636
Concrete tanks---Design and construction---Handbooks, manuals, etc 267
Conductivity 1634
conference proceedings 128
conferences 1054, 1211, 1565, 1787, 1802
confined animal feeding operations 1359
Confinement farms Waste disposal---United States 268
conifer (Coniferopsida) 463
coniferous forests 174, 573, 1427
conjunctive use 1215
connectivity 795, 815
consequences 817
conservation 62, 165, 184, 193, 212, 227, 234, 272, 273, 382, 424, 429, 463, 466, 537, 654, 689, 706, 732, 799, 804, 848, 943, 1098, 1123, 1176, 1233, 1248, 1282, 1295, 1340, 1357, 1493, 1516, 1597, 1600, 1627, 1635, 1638, 1680, 1685, 1726
conservation areas 516
conservation biology 512
conservation buffers 577, 1720, 1729
conservation implications 1639
Conservation in agricultural use 1609, 1734
Conservation of natural resources 270
conservation practices 43, 65, 684, 1158
conservation priorities 1625
conservation programs 80
Conservation Reserve Program 516, 986
conservation strategies 1347
conservation tillage 7, 117, 118, 215, 226, 274, 275, 277, 278, 279, 281, 282, 300, 318, 472, 536, 537, 558, 593, 642, 671, 684, 830, 899, 997, 1077, 1088, 1173, 1189, 1304, 1338, 1339, 1366, 1389, 1472, 1519, 1565, 1569, 1587, 1602, 1619, 1637, 1640, 1641, 1669, 1671, 1767, 1768
Conservation tillage---Appalachian Region 312
Conservation tillage---Economic aspects 406
Conservation tillage---Environmental aspects 406
Conservation tillage---Great Plains 314, 317
Conservation tillage---Middle West 313
Conservation tillage---Northeastern States 312
Conservation tillage---Northwestern States 315
Conservation tillage---Southern States 316
Conservation tillage---United States 280, 580
Conservation, wildlife management and recreation 37, 566, 816, 1215, 1233, 1248, 1443, 1597, 1814
constraints 52, 61, 810, 841, 1492
constructed wetland usage 1686
constructed wetlands 284, 285, 286, 292, 521, 631, 718, 767, 1252, 1391, 1610, 1696
Constructed wetlands---Case studies---Congresses 290
Constructed wetlands---Cold weather conditions 289
Constructed wetlands---Congresses 290
Constructed wetlands---Design and construction 291
Constructed wetlands---Middle Atlantic States---Handbooks, manuals, etc 632
Constructed wetlands---North America 283
Constructed wetlands---Rocky Mountains 293
Constructed wetlands---United States 304, 628
Constructed wetlands---United States---Case studies 288
Constructed wetlands---West---United States 293
construction 227, 1078
container grown plants 1699
Contaminant Candidate List [CCL] 370
contaminant extraction 531
Contaminant Input 1685
contaminants 20, 44, 130, 412, 616, 928, 1041, 1090, 1391, 1403, 1522, 1579, 1648
contaminants: bioavailability 1508
contaminated sediment 764
contaminated sediments 529, 581, 613, 934
Contaminated sediments---United States 709, 1142, 1143
contaminated soil 185
contaminated soils 529, 581
Contamination 188, 321, 372, 483, 544, 587, 602, 873, 961, 1093, 1116, 1135, 1147, 1235, 1314, 1324, 1364, 1578, 1693, 1782, 1791
contingent valuation 106
continuous cropping 309, 1472, 1519, 1768
contour cultivation 865
Control 147, 206, 387, 431, 604, 609, 754, 758, 949, 1011, 1024, 1073, 1193, 1245, 1389, 1454, 1590, 1707
control methods 321, 393, 839
Control of water on the surface 378, 1073, 1337, 1665, 1735
control parameters 1364
Control programs 740, 744, 1769
controlled grazing 1521
controlled release 1091, 1710
conventional farming 375
cooperation 1515, 1612
Cooperative State Research, Education, and Extension Service 81
copper 148, 418, 692, 1296
cordifines: antifeedant, natural product 968
cores 1383
Corn Belt States of USA 319, 788, 852, 1566
corn (Gramineae) 257
Correlation analysis 1101
cost analysis 292, 407, 458, 685, 1545
cost benefit analyses 585
cost benefit analysis 86, 106, 666, 786, 1302, 1676, 1727
cost increasing events 1197
costs 143, 226, 516, 606, 769, 776, 1097, 1190, 1281, 1377, 1595, 1702
costs and returns 281
cotton 282, 700, 786, 788, 1077, 1602

- Cotton---Diseases and pests---
Integrated control---West---
United States** 739
- Cotton---Diseases and pests---
West---United States** 739
- cotton (Malvaceae): fiber crop**
473, 1673
- coupled column liquid
chromatography** 1593
- cover** 389
- cover composition** 823
- cover crops** 117, 226, 279, 300,
301, 302, 358, 642, 788, 997,
1007, 1082, 1234, 1366, 1557,
1707, 1715, 1767, 1768
- Cover crops---Northeastern States-
--Handbooks, manuals, etc**
1021
- Cover crops---United States** 1079
- cows** 195, 252, 417, 756, 876, 881,
994, 1024, 1255, 1518
- Coxsackievirus (Picornaviridae):
disinfection resistance,
pathogen** 370
- CREAMS Model** 542
- critical levels** 423
- critical loads** 131, 423
- critical review** 209
- critical reviews** 1431
- crop** 300
- crop (Angiospermae)** 257, 1619
- crop (Angiospermae): major
growth phases** 785
- crop damage** 63, 265
- crop establishment** 1366
- crop growth stage** 1247, 1444
- crop land buffers** 1645
- crop loss** 595
- crop management** 19, 105, 281,
319, 320, 325, 445, 505, 599,
642, 720, 726, 735, 750, 776,
846, 849, 865, 995, 1002, 1007,
1020, 1058, 1060, 1063, 1112,
1174, 1247, 1313, 1326, 1336,
1564, 1620, 1710, 1812
- crop management practices** 886
- crop nutrition** 1552
- crop plant (Angiospermae)** 643
- crop plant resistance** 172
- crop plants as weeds** 1112
- crop production** 36, 147, 157, 203,
256, 358, 382, 387, 474, 593,
652, 788, 855, 888, 991, 1120,
1129, 1205, 1219, 1549, 1602,
1622, 1642, 1715, 1725, 1730,
1739, 1767, 1773
- Crop production (intercropping)**
761
- crop quality** 224, 256, 377, 705,
937, 1812
- crop residue** 1619
- Crop residue management---
Appalachian Region** 312
- Crop residue management---Great
Plains** 314, 317
- Crop residue management---Middle
West** 313
- Crop residue management---
Northeastern States** 312
- Crop residue management---
Northwestern States** 315
- Crop residue management---
Southern States** 316
- crop residues** 60, 213, 281, 309,
318, 371, 478, 642, 678, 720,
788, 885, 899, 948, 987, 1003,
1007, 1020, 1028, 1173, 1192,
1219, 1304, 1338, 1339, 1410,
1470, 1472, 1640, 1641, 1730
- crop rotation** 7, 116, 311
- crop tolerance** 908
- crop weed competition** 358, 391,
749, 1458, 1576, 1771
- crop yield** 12, 36, 117, 256, 302,
309, 377, 428, 443, 445, 474,
523, 653, 678, 679, 693, 719,
749, 776, 786, 792, 846, 937,
975, 991, 995, 1008, 1033,
1058, 1060, 1166, 1174, 1200,
1225, 1245, 1247, 1264, 1326,
1336, 1344, 1345, 1385, 1444,
1488, 1490, 1496, 1519, 1549,
1602, 1669, 1717, 1771, 1812
- cropland** 43, 470, 1049, 1585
- cropping practices** 1189
- cropping sequences** 1768
- cropping strategies** 1027
- cropping systems** 54, 55, 221, 224,
275, 320, 365, 382, 407, 537,
593, 672, 693, 810, 841, 852,
855, 975, 1003, 1120, 1173,
1174, 1200, 1219, 1234, 1245,
1313, 1336, 1533, 1569, 1576,
1628, 1637, 1771, 1804
- cropping systems in the great
plains** 407, 593, 1219
- crops** 60, 197, 213, 309, 310, 375,
390, 428, 443, 465, 479, 523,
562, 599, 615, 782, 899, 941,
975, 997, 1002, 1007, 1033,
1173, 1175, 1193, 1225, 1268,
1288, 1327, 1355, 1376, 1389,
1394, 1409, 1457, 1490, 1533,
1557, 1563, 1644, 1710
- Crops and nitrogen** 996
- Crops and water---Environmental
aspects---California** 1330
- Crops and water---Research---
United States** 1562
- crops (Angiospermae)** 908
- Crops---Nutrition** 1551
- cross resistance** 590, 1341
- crude protein** 1044
- Crustacea (Crustacea Unspecified)**
234, 1635
- Crustaceans** 234, 814, 1635
- crustaceans (Crustacea)** 814
- crustaceans (Crustacea
Unspecified)** 234, 1635
- crusting** 18
- crusts** 1533
- Cry1A toxin** 729
- Cryptosporidium** 321, 322, 351,
541, 1097, 1103
- Cryptosporidium parvum** 1097,
1757
- CSREES** 81
- cucumis melo** 705, 1063
- cucumis sativus** 705, 735
- Culicidae** 431
- cultivars** 309, 310, 325, 358, 445,
479, 846, 1009, 1033, 1112,
1247, 1336, 1717
- Cultivated Lands** 29, 273, 390,
1645
- cultivation** 42, 63, 66, 226, 282,
358, 537, 551, 579, 677, 720,
1009, 1077, 1219, 1640, 1641,
1669, 1770
- cultural control** 256, 265, 358, 593,
678, 749, 1245, 1389, 1557,
1576, 1767
- cultural methods** 282, 830, 1245
- cumulative effects** 809
- cumulative impact analysis** 324
- current ripples** 1509
- current use pesticides** 327
- current use pesticides: pesticide,
pollutant, toxin,
transformation products** 133
- CW2D** 1525
- cyanazine** 833
- Cyanobacteria** 231, 370, 638, 909
- cyanobacteria (Cyanobacteria)**
909
- cyanobacteria (Cyanobacteria):
pathogen, waterborne** 370
- Cyanophyta** 452
- cycle** 965
- cycling** 49, 213, 224, 279, 483, 634,
652, 653, 676, 994, 1000, 1001,
1028, 1029, 1037, 1209, 1338,
1376
- cycling nutrients** 160, 1004, 1030,
1034
- cycloate** 1658
- cyclorrhapha** 175
- Cyclospora** 452
- Cydia pomonella** 1075
- Cyprus** 369
- cytoplasm** 1490
- dairies** 292
- dairy cattle** 72, 756, 994, 1191
- dairy cows** 1255, 1416
- dairy farm management** 624
- dairy farming** 72, 1255
- dairy farms** 252, 417, 673, 876,
950, 994, 1255
- dairy industry** 292
- dairy manure** 860
- DAISY model** 160
- Dam Construction** 1226
- Dam Failure** 939
- dam removal** 1676
- damage** 539, 805, 907
- damming** 654

Subject Index

- dams** 62, 227, 333, 598, 602, 939, 1226, 1311, 1337, 1437, 1446, 1638, 1676
- dangerous organisms** 322, 349, 636, 833, 1121
- Daphnia** 1343
- Data acquisition** 924, 1363, 1413
- data analysis** 171, 425, 679, 784, 1480
- data collection** 518, 679, 715, 1276
- Data Collections** 344, 433, 452, 833, 1363, 1413
- Data handling** 1413
- Data Interpretation** 833, 1445
- database** 1532
- Databases** 138, 330, 705, 833, 944, 961, 1377, 1775
- daucus carota** 1715
- Daucus carota [tomato] (Umbelliferae): vegetable crop** 254
- DDE: pesticide** 560
- DDT** 186, 331, 1373
- DDT: pesticide** 560, 1070
- Dead animal disposal---Saskatchewan** 515
- Dead animals, Removal and disposal of** 733
- Dead animals---Saskatchewan** 515
- dead trees** 821
- Dechlorination** 186
- deciduous forests** 174, 1427
- decision making** 6, 12, 365, 391, 492, 599, 693, 705, 711, 792, 862, 1334, 1367, 1443, 1444, 1717, 1804
- decision support systems** 80, 81, 1334
- declines** 520
- decomposers** 1030
- decomposition** 4, 5, 213, 309, 335, 384, 695, 910, 1030, 1060, 1115, 1304, 1318, 1399, 1461, 1519, 1540, 1587, 1630, 1650
- defaunation** 1303
- defense mechanism** 1177
- defense mechanisms** 12
- defoliation** 89
- deforestation** 551, 1627
- degradation** 4, 9, 75, 210, 335, 337, 494, 640, 642, 678, 1030, 1034, 1083, 1115, 1116, 1120, 1236, 1290, 1395, 1448, 1523, 1616, 1630, 1656, 1675
- degraded forests** 1349
- degree of mineralization** 1114
- dehydrogenase activity** 915
- Delaware** 577
- delivery** 1072
- Delta Marsh Restoration** 1685
- deltas** 1437
- demand** 475, 1689
- demographic changes** 1639
- demographic stochasticity** 512
- demography** 14
- demonstration projects** 1164
- Dempster Shafer Reasoning** 141
- denitrification** 32, 338, 339, 421, 453, 486, 534, 798, 800, 868, 988, 990, 991, 1000, 1003, 1027, 1269, 1358, 1398, 1536, 1710, 1720
- denitrifying microorganisms** 868
- Denmark** 105, 455, 677, 892, 1005
- density** 677, 1304, 1482
- density dependence** 512
- department for international development** 1756
- deposition** 111, 165, 214, 534, 932, 1011, 1066, 1653, 1813
- depth** 693, 1247
- derived distribution** 710
- Descriptors: Dissipation** 542
- desert rodents** 1727
- desertification** 449, 781, 1273, 1549
- deserts** 340, 665, 690
- design** 343, 345, 1312, 1368, 1372, 1431, 1572
- design criteria** 344, 378, 492, 1615
- Design data** 344
- design standards** 292
- Desilting basins** 1023
- desorption** 439, 618, 1376, 1578
- detection** 326, 969, 1009, 1646, 1687
- detention ponds** 521
- detergents** 1388
- Determination** 558, 1235, 1392, 1563
- detoxification** 1125, 1167, 1578
- detritus** 110
- Developing Countries** 287, 510, 1378, 1379
- development** 25, 1775
- developmental stages** 14, 1308, 1458
- diagnosis** 367, 705, 1308
- diatom (Chrysophyta): periphyton** 368
- dibenzo p dioxins** 457
- dibenzofuran: pollutant** 93
- dicofol: pesticide** 560
- dicots** 115, 177, 179, 234, 235, 254, 473, 613, 667, 669, 716, 724, 823, 850, 952, 1483, 1496, 1673
- die back** 128
- diesel** 473
- diet** 1737
- diet modification** 446
- dietary minerals** 692
- dietary restriction** 1052
- diets** 130, 467, 676, 1044, 1163, 1191, 1255
- diffuse environmental contamination** 853
- diffusion** 789
- diffusivity** 677, 867
- digesta** 244
- digestibility** 244, 547, 1163, 1293, 1460
- digestive additives** 8
- Digital map data** 1377
- dilution** 123
- dimensional analysis** 1495
- dimensionality** 794
- Diptera** 148, 175, 431, 1648
- Diptera (Diptera)** 1807
- direct sowing** 677, 1007, 1519, 1669
- disc harrows** 885
- discharge** 19, 345, 510, 710, 1368
- discing** 1602, 1640
- disciplinary research** 1636
- disease** 851
- disease and pest management** 281, 458
- disease control** 735, 970, 1254, 1321, 1576, 1757
- disease prevention** 691, 1203
- disease resistance** 240, 432, 612, 678, 701, 1321, 1717
- disease transmission** 83, 322, 636, 691, 969, 1097
- disease vectors** 691
- diseases** 282, 636, 1173, 1389
- disinfectants** 1448, 1732
- Disinfection** 322, 1252, 1442
- disinfection by products [DBPs]: formation, pollutant, toxin** 854
- disinfection byproducts** 1732
- dispersal** 173, 932, 1243, 1494
- dispersion** 123, 932
- dissipation** 1397
- dissipation pathways** 553
- Dissolved chemicals** 934
- dissolved organic carbon** 327
- dissolved organic matter** 371, 986
- dissolved organic matter loading** 1110
- dissolved oxygen** 339, 1185, 1369, 1464
- distance** 1315
- distribution** 1147, 1494
- Distribution (Mathematical)** 1581
- District of Columbia** 577
- Disturbance** 88, 184, 424
- disturbance regimes** 1250, 1451
- disturbed land** 579, 821
- disturbed soils** 1555
- ditch blocking** 659
- dithiocarbamate: pesticide** 906
- diuron: insecticide, quantitative analysis** 78
- diverse aquatic ecosystems linkages** 813
- diversity** 1088, 1543, 1693
- DNA fingerprinting** 361
- Domestic wastes** 372
- domestication** 970
- Dominant species** 234
- Don River** 1685
- dormancy breaking** 478
- dosage** 915
- dosage effects** 1555
- dose dependent effects** 915
- double cropping** 1768

- Double Stranded DNA Viruses** 370
Douglas fir western hemlock forest stands 812
Downstream 1226
Drainage 21, 378, 380, 381, 441, 567, 602, 625, 659, 668, 684, 798, 1116, 1156, 1257, 1268, 1346, 1347, 1348, 1386, 1439, 1488, 1579, 1633, 1643, 1714, 1729
Drainage---Australia---New South Wales---Management 664
Drainage---Australia---New South Wales---Planning 664
Drainage---Australia---Victoria---Handbooks, manuals, etc 778
drainage basins 603
Drainage---Congresses 779, 1606
Drainage effects 1049
Drainage---Environmental aspects--
-Developing countries 482
Drainage---Environmental aspects--
-Sweden 296
Drainage---Handbooks, manuals, etc 379
Drainage---Management 22, 838, 844, 871
Drainage---Middle West 23
drainage patterns 1495, 1656
Drainage rates 32
drainage systems 1288
drainage water 44, 188, 582, 920, 947, 1063, 1194, 1419, 1469, 1748
Dredging 108, 1508
drift 444, 454, 1813
drift mitigation strategies 1813
Drilling fluids 918
drinking water 100, 321, 322, 347, 351, 370, 452, 541, 635, 638, 969, 1097, 1150, 1654, 1732, 1737, 1741
Drinking water---Contamination---Prevention 858
drinking water microbial safety: global perspectives 914
Drinking water---New York, NY 1763
Drinking water---Purification---Congresses 1449
drinking water supplies: management 854
Drip Irrigation 1609
droplet studies 1474
drought 114, 320, 333, 553, 781, 1194, 1248, 1446, 1752
drought resistance 1488
droughts 794
drug residues 1198, 1297, 1732
drugs 1198, 1732
dry farming 36, 92, 995, 1219, 1641
dry lot feeding 409
dry matter 1082, 1281
dry matter distribution 1166
dry particle deposition 133
dryland salinity 476, 1487
durability 1321
duration 1247, 1727
duration curves 710
dust 1024, 1399, 1549, 1811
dust control 1811
dust emissions 1071
dusts 921
DWSM (model) 1764
dynamic models 106, 1367
dynamics 7, 184, 512, 795, 800, 988, 1001, 1131
Dynamics of lakes and rivers 569, 1495, 1615, 1724
dysaphis plantaginea 741
earliness 1812
early successional communities 1625
Earth construction 385
Earth Sciences 1315, 1509
earth surface systems 802
earthworms 105, 558, 648, 1088, 1304, 1457, 1693
earthy flavors 909
eastern North America 588
Eastern North Carolina 714
ecdysteroids 651
Echovirus (Picornaviridae): disinfection resistance, pathogen 370
ecohydrology 1352
Ecological assessment---Biology---United States 126
Ecological assessment---United States 357
ecological balance 409, 944, 1276, 1365
ecological characteristics 630
ecological conditions 915
ecological crisis 390, 1791
Ecological Distribution 1418
ecological economics 1340
ecological effects 167, 431, 442, 799, 1337, 1418, 1469, 1579, 1597, 1791
ecological forecasts 389
ecological impact 1356
Ecological impact of water development 38, 227, 431, 1226, 1597, 1638, 1676
Ecological implications of livestock herbivory in the west 690
Ecological integrity---United States 357, 765
Ecological mapping 1780
ecological processes 659
ecological processes: evolution 809
ecological productivity 1487
ecological refugia 801
ecological restoration 577, 767, 1259, 1599
ecological restoration: intermediate 1352
ecological risk 1507
ecological risk assessment 368, 1508
ecological significance 128
ecological succession 667
Ecological techniques and apparatus 1413, 1607
ecological thresholds 1723
ecologically based Hydrogeomorphic approach 392
ecologically based pest management 1465
Ecology 7, 37, 61, 89, 94, 130, 182, 207, 243, 325, 389, 390, 397, 398, 400, 466, 479, 512, 520, 521, 552, 573, 576, 591, 605, 683, 685, 686, 710, 712, 730, 749, 768, 795, 800, 811, 816, 928, 934, 964, 965, 970, 1061, 1088, 1098, 1100, 1161, 1173, 1227, 1267, 1278, 1323, 1351, 1369, 1424, 1469, 1511, 1525, 1587, 1620, 1650, 1693, 1711, 1721, 1729, 1758
Ecology (Environmental Sciences) 1123
Ecology---United States 491
economic analysis 106, 138, 391, 408, 445, 530, 679, 769, 776, 1033, 1063, 1236, 1405, 1444, 1529, 1549, 1572, 1812
Economic aspects 1012, 1013
economic changes 1639
Economic Entomology 731, 1285
economic evaluation 407
economic impact 265, 673, 734, 786, 1197, 1487
economic indicators 792
economic injury level 265
economic significance 128
economic thresholds 391
economics 407, 682, 685, 841, 853, 1008, 1014, 1016, 1076, 1167, 1248, 1595
ecosystem 728
ecosystem analysis 412, 1633
Ecosystem disturbance 62, 222, 390, 438, 493, 565, 685, 770, 1057, 1638, 1726, 1791
ecosystem dynamics: freshwater, riparian 1094
ecosystem function 667, 669, 851
ecosystem functioning 794
ecosystem health 354, 356
Ecosystem health West United States 713
ecosystem integrity 667
Ecosystem management 97, 174, 184, 497, 622, 649, 696, 816, 1034, 1073, 1233, 1337, 1346, 1401, 1493, 1516, 1554, 1597, 1726, 1735
Ecosystem management---United States 101, 763
ecosystem models 928
ecosystem performance 102

Subject Index

- ecosystem processes** 630, 1540
ecosystem productivity 1352
ecosystem recovery: mechanisms, scales 1431
Ecosystem resilience 565, 1676
ecosystem responses 694, 989
ecosystem restoration 1680
ecosystem science 794
ecosystem studies 812
ecosystems 50, 60, 105, 154, 170, 174, 184, 212, 216, 224, 265, 266, 309, 333, 339, 340, 341, 400, 412, 423, 434, 436, 464, 479, 544, 551, 565, 573, 579, 599, 602, 634, 649, 653, 683, 685, 712, 758, 768, 769, 773, 798, 811, 934, 944, 964, 970, 971, 975, 976, 1030, 1057, 1081, 1098, 1101, 1128, 1236, 1331, 1351, 1365, 1418, 1424, 1427, 1436, 1447, 1467, 1485, 1515, 1543, 1555, 1580, 1597, 1612, 1622, 1647, 1650, 1691, 1698, 1708, 1753, 1791, 1802
Ecosystems and energetics 339, 415, 426, 900, 1162, 1401
Ecosystems management---United States 583
ecotones 400, 768, 798, 1424
ecotoxicity 123
ecotoxicological significance experience 915
ecotoxicological testing 915
ecotoxicology 100, 133, 134, 135, 166, 168, 343, 412, 641, 854, 916, 1107, 1122, 1179, 1201, 1296, 1476, 1507, 1636, 1658
ecotypes 1101, 1690
ectoparasites 1206
edaphic factors 140
eddy correlation 916
edge effect 895, 1243
education 607, 769, 813, 1270
eelgrass zosteria marina 714
effective assessment procedures: formulation 809
effective monitoring procedures: formulation 809
effects 88, 168, 300, 423, 671, 1494
Effects of pollution 130, 148, 167, 247, 433, 434, 435, 442, 636, 683, 721, 799, 922, 1057, 1090, 1121, 1128, 1249, 1343, 1373, 1403, 1418, 1469, 1648, 1650
effects on 432
Effects on organisms 110, 130, 148, 162, 167, 247, 432, 433, 442, 683, 721, 1057, 1343, 1373, 1401, 1462, 1469, 1638, 1650
Effects on water of human nonwater activities 324, 415, 426, 1346
efficacy 163, 212, 975, 1175
efficiency 341, 444, 474, 1236, 1564
efficient feed nutrient utilization 446
Effluent 1403
Effluent quality---United States 586
effluents 170, 447, 1403
efflux 464, 1563
eggs 1373, 1706
eggshell thickness 560
Eichhornia crassipes 1073, 1735
El Nino Southern Oscillation [ENSO] 449
elasticities 786
elateridae 516
electrical conductivity 450, 1281
electricity 1207
Electronic publications 420
elevated atmospheric CO2 238
elutriate exposure [extract exposure] 1476
emission 8, 26, 49, 58, 66, 215, 224, 277, 294, 414, 440, 453, 454, 455, 540, 604, 652, 798, 868, 892, 893, 932, 990, 998, 1003, 1005, 1085, 1229, 1240, 1381, 1382, 1402, 1415, 1541, 1549, 1627, 1675, 1690, 1789, 1790
emission factors 69, 1359
emission reduction 704
emission reductions 1296
emissions 56, 457, 1004, 1497
emissions mitigation 119
Emperor goose 1469
encapsulated calcium carbide 897
Encephalitozoon intestinalis (Cnidosporidae): disinfection resistance, pathogen, waterborne 370
enclosure method 1563
endangered species 271, 512, 584, 673, 848, 976, 1332, 1433, 1690, 1708
endangered species act 272
Endangered species---West---United States 461
endemic species 1332
endocrine disrupters 442
endocrine disrupting chemicals 442
endocrine disruption 1476
endocrine disruptors 442, 1090, 1403
Endocrine glands 1090, 1403
Endocrine system 1090, 1403
endosulfan: insecticide, toxin, pollutant 134
endotoxins 479, 1341
energy 1207
energy balance 916
energy content 1416
energy expenditure 409
energy flow 630
energy relations 409
energy sources 13, 1394, 1416
Engineering 193, 462, 569, 1364, 1628
England 455
enrichment 170, 521, 1030
Enteric bacteria 351
Enterobacteriaceae 90, 376, 541, 969, 1103
Enterovirus 452
Entisols 1519
Entomologist 731
Entomology 238, 327, 563, 1075, 1532
entomopathogenic fungus 238
Environment 7, 93, 168, 182, 219, 243, 389, 414, 473, 512, 520, 521, 605, 671, 710, 792, 795, 800, 829, 965, 1061, 1100, 1161, 1191, 1267, 1278, 1369, 1371, 1372, 1445, 1485, 1525, 1718, 1729, 1758, 1791
Environment management 227, 438, 696, 804, 816, 964, 1034, 1073, 1167, 1462, 1516, 1597, 1600, 1645, 1726
environmental 349, 1346
Environmental action 3, 4, 222, 273, 390, 493, 565, 816, 964, 1034, 1076, 1090, 1119, 1215, 1248, 1337, 1379, 1443, 1516, 1597, 1659, 1676, 1735
environmental analysis 662
Environmental Applications 1078
environmental assessment 58, 341, 354, 391, 629, 903, 944, 1294, 1372, 1515, 1547, 1612, 1691, 1804
environmental assessments 752
environmental benefits 472
Environmental changes 62
environmental chemistry 571
environmental concerns 172
environmental conditions 24, 886
environmental contamination 471, 585, 1107, 1508, 1755
environmental control 228, 1381
environmental decision making 597
environmental degradation 38, 324, 390, 415, 426, 465, 475, 792, 1201, 1248, 1347, 1633
environmental disturbance 916
environmental education 272, 1259
environmental effects 162, 227, 324, 415, 426, 542, 721, 919, 921, 923, 1346, 1579, 1638, 1791
Environmental Engineering & Energy 457, 965
environmental factors 186, 414, 466, 533, 681, 1563, 1737
environmental fate 327, 1523
environmental flows 694
environmental gradient 1451
environmental health 800, 1109

- environmental heterogeneity** 794, 1451
- environmental history** 817
- environmental impact** 26, 40, 41, 46, 62, 68, 105, 107, 108, 123, 124, 153, 196, 197, 200, 227, 228, 250, 265, 324, 335, 377, 390, 394, 414, 415, 426, 427, 438, 448, 464, 467, 474, 475, 479, 481, 483, 486, 488, 493, 500, 501, 518, 551, 598, 599, 629, 667, 668, 676, 682, 683, 685, 734, 756, 799, 821, 825, 835, 864, 920, 923, 934, 995, 1011, 1073, 1083, 1102, 1122, 1131, 1154, 1158, 1172, 1183, 1191, 1192, 1196, 1197, 1201, 1237, 1248, 1255, 1294, 1337, 1339, 1343, 1373, 1419, 1448, 1453, 1457, 1485, 1487, 1515, 1579, 1595, 1616, 1650, 1675, 1676, 1732, 1759, 1804, 1814
- Environmental impact analysis---Developing countries** 482
- Environmental impact analysis---United States** 126
- Environmental Impact and Protection** 266
- environmental impacts** 166
- environmental implications** 209
- Environmental indicators---United States** 1705
- Environmental indicators---United States---Mathematical models** 1704
- environmental law** 807
- Environmental Law, Regulations & Policy** 816
- environmental legislation** 207, 673, 827, 1759
- environmental linkages** 814
- environmental management** 192, 210, 694, 792, 1364, 1388, 1423, 1424, 1457, 1515, 1721, 1804
- environmental manure pollutants** 1475
- environmental microbiology** 504
- Environmental Modeling** 649, 934
- environmental models** 295
- environmental monitoring** 1, 295, 342, 575, 1076, 1220, 1259, 1413, 1493, 1500, 1501, 1502, 1503, 1516, 1600, 1740
- Environmental monitoring---North America** 150
- Environmental monitoring---United States** 491, 765, 1713
- environmental persistence** 134
- environmental policy** 40, 43, 86, 222, 412, 492, 493, 825, 923, 939, 1017, 1034, 1597, 1732
- Environmental policy---United States** 491
- environmental pollution** 896, 927, 967
- environmental pollution analysis: quality assurance, quality controls, reference materials** 1466
- environmental protection** 43, 46, 54, 65, 128, 223, 266, 382, 448, 455, 488, 565, 576, 598, 599, 650, 673, 816, 867, 871, 918, 921, 944, 961, 964, 1117, 1124, 1129, 1174, 1196, 1259, 1337, 1405, 1415, 1424, 1435, 1443, 1478, 1493, 1504, 1505, 1506, 1510, 1553, 1620, 1633, 1659, 1800
- Environmental protection agencies** 335
- Environmental Protection Agency** 81, 192
- Environmental protection---United States** 491
- environmental quality** 38, 86, 390, 459, 674, 816, 943, 1373, 1630, 1633, 1676, 1679
- environmental quality: protection** 1692
- Environmental quality standards** 1630
- Environmental restoration** 193, 273, 696, 1167, 1435, 1630, 1676
- environmental risks** 1679
- environmental samples** 77, 906
- environmental samples: chemical analysis** 832
- Environmental sampling---United States** 1605
- environmental sciences** 669
- environmental stress** 1638
- Environmental Studies, Geography & Development** 714
- environmental surveillance** 469
- Environmental surveys** 1600
- environmental temperature** 523, 735, 971
- environmental temperatures** 134
- environmental toxicology** 1123
- environmentally aggressive chemicals** 1177
- Environmentally degradable polymeric materials (EDPM)** 501
- enzymatic activity** 1607
- enzyme activities** 1536
- enzyme activity** 244, 834, 1543
- enzyme inhibitors** 479
- enzyme inhibitors: insecticide** 1177
- enzyme preparations** 244, 692, 1044, 1190
- enzymes** 410, 511, 547, 1607
- enzymes: feed supplement** 446
- EPA** 81, 575
- Ephemeral Streams** 1239
- Ephemeroptera** 148
- epidemics** 163
- epidemiology** 12, 452, 691, 697, 1308, 1321, 1772
- Epidemiology (Population Studies)** 240
- epistemology** 504
- EPTC** 1658
- equations** 19, 519, 522, 1369, 1385, 1542
- equilibrium morphology** 1509
- equilibrium systems** 1723
- equipment** 326, 881, 1185, 1281, 1304, 1392, 1529, 1702
- Eradication** 506
- eroded soils** 1392
- erodibility** 1533, 1542
- erosion** 18, 24, 91, 94, 106, 111, 194, 214, 226, 277, 303, 318, 330, 340, 341, 413, 445, 507, 508, 509, 510, 518, 519, 521, 537, 539, 551, 627, 642, 653, 672, 677, 678, 679, 715, 722, 788, 805, 821, 869, 940, 970, 971, 1082, 1087, 1089, 1092, 1157, 1192, 1241, 1271, 1298, 1304, 1312, 1360, 1385, 1386, 1392, 1394, 1401, 1410, 1427, 1429, 1452, 1471, 1478, 1527, 1532, 1533, 1534, 1541, 1545, 1546, 1547, 1548, 1549, 1559, 1570, 1622, 1637, 1643, 1669, 1674, 1688, 1697, 1765, 1766, 1775
- Erosion and sedimentation** 110, 111, 416, 437, 438, 890, 1271, 1383, 1656
- erosion control** 15, 41, 106, 295, 301, 302, 318, 341, 361, 509, 537, 629, 652, 672, 885, 1031, 1183, 1189, 1248, 1312, 1377, 1392, 1394, 1477, 1478, 1480, 1527, 1541, 1641, 1645, 1715, 1768
- erosion pattern** 307
- erosion rates** 723, 890
- Erosion---Southwestern States** 554
- Erosion---United States---States** 760
- Erosion---West---United States** 1701
- error propagation** 927
- errors** 79, 1281
- Erwinia amylovora (Enterobacteriaceae)** 90
- erynia neoaphidis** 238
- Escherichia coli** 349, 351, 376, 541, 969, 1103, 1195, 1660
- Escherichia coli (Enterobacteriaceae): decomposer, genetically engineered organism** 1694
- Escherichia coli O157:H7** 541, 1757
- establishment** 176, 384, 391, 821, 1410
- esterase** 511

Subject Index

- esterases** 244, 511
Esters 511
estimate bias sources 1374
estimates 92, 1627
estimation 92, 518, 604, 1096, 1294, 1533, 1627
estradiol 545, 1046
estrone 545, 1046
estuaries 41, 46, 166, 222, 236, 263, 339, 500, 605, 892, 999, 1098, 1287, 1581, 1650
estuaries: dissolved oxygen gradients, pH gradients, productive marine ecosystems, redox potential gradients, temperature gradients, variable salinity 122
estuarine biota (Organisms) 122
Estuarine chemistry 339
Estuarine organisms 1516, 1650
estuarine processes 122
estuarine sediment: chemical assessment techniques, community level assessment techniques, toxicological assessment techniques 122
estuary 396
ethics 224, 1781
ethylene 478
Eubacteria 90, 336, 350, 370, 553, 670, 729, 814, 851, 909, 1107, 1177, 1384, 1618, 1619, 1662, 1694, 1807
Eubacterium (Irregular Nonsporing Gram Positive Rods) 1384
Eucalyptus 627, 1568
euphorbia esula 769
Euphorbia esula [leafy spurge] (Euphorbiaceae): weed 177
Europe 163, 170, 202, 206, 222, 277, 390, 395, 464, 466, 510, 677, 682, 741, 882, 892, 950, 1005, 1046, 1117, 1194, 1243, 1255, 1304, 1305, 1323, 1346, 1367, 1368, 1548, 1577
European Beaver 598
European Union 473
eutrophic lake 1468
eutrophication 29, 30, 34, 170, 222, 263, 292, 339, 364, 390, 481, 500, 521, 551, 630, 649, 696, 714, 800, 817, 854, 989, 1011, 1037, 1157, 1158, 1212, 1236, 1241, 1340, 1347, 1352, 1356, 1386, 1388, 1401, 1405, 1445, 1448, 1462, 1464, 1575, 1581, 1633, 1638, 1732
Eutrophication---Control---Mexico, Gulf of 420
Eutrophication---United States 1582
evaluation 99, 163, 263, 325, 394, 518, 519, 938, 945, 1073, 1185, 1247, 1281, 1304, 1457, 1563, 1620, 1645
Evaluation process 816, 1435
Evaluation, processing and publication 1377
evaporation 15, 36, 301, 443, 444, 705, 782, 937, 1225, 1240
evapotranspiration 92, 301, 415, 441, 484, 522, 523, 562, 677, 782, 870, 971, 1033, 1169, 1225, 1247, 1288, 1491, 1720, 1735
evolution 729, 970, 1321, 1447, 1490, 1637
evolutionary biology 675
evolutionary characteristics 630
excessive environmental nutrient loading modeling 927
exchangeable phosphate 263
excreta 1252
excretion 198, 417, 418, 692, 1044, 1163, 1198, 1255, 1416, 1595
excretory behavior 1359
Exotic Species 770, 1073, 1638
exotic species introduction 630
experience 1270
Experimental Data 1159
experimental design 343, 530, 641, 679, 824, 1727
experimental plots 301
Experimental research 247, 1343
expert system applications 528
expert systems 705, 1294
explosives 1169, 1362
export 800, 965
exposure 123, 376, 533, 545, 1122, 1249, 1693, 1706, 1732, 1809
exposure durations 166
exposure tolerance 721
extension 382
extension education 514, 1465, 1773
externalities 40
extinction 512, 1172
extinction risk 512
extraction 531
extreme flood 1267
fabaceae 1082
Factory and trade waste as fertilizer 790
Facultatively Anaerobic Gram Negative Rods 90
Faidherbia albida (Leguminosae) 1496
Falco peregrinus 424
fallow 36, 537, 869, 1219, 1640
fallowing 1248
false positives 1107
famoxadone: environmental safety, fungicide, mode of action, risk, strobilurin, synthesis 1603
famphur: pesticide 560
farm income 41, 1008, 1295
farm inputs 474, 1773
farm machinery 1007, 1230, 1231, 1627
farm management 50, 252, 505, 518, 533, 787, 894, 1236, 1585, 1627, 1804
Farm manure 260, 875
Farm manure---Composition 875
Farm manure---Congresses 87
Farm manure---Environmental aspects---Minnesota 877
Farm manure---Environmental aspects---United States 268
Farm manure in methane production---United States---Case studies 901
Farm manure, liquid---Environmental aspects 883
Farm manure, Liquid---Odor control---North Carolina 360
Farm manure---Management 1632
Farm manure---Minnesota 877
Farm manure---Storage 385
Farm manure---Storage---Handbooks, manuals, etc 267
farm model 104
farm nutrient flow: systems approach 328
farm scale nutrient budgets: soil fertility management tool 1374
Farm Wastes 34
farmed organic soil 614
farmers 1163, 1367, 1702, 1804
farmers' attitudes 1671
farming 54, 91, 375, 451, 717, 1270, 1412, 1439, 1443
farming systems 30, 51, 54, 72, 91, 203, 212, 393, 414, 537, 538, 591, 668, 784, 841, 855, 870, 950, 1000, 1009, 1028, 1175, 1255, 1366, 1494, 1553, 1628, 1641, 1669
farmland 19
farms 266, 390, 518, 784, 860, 994, 1702
Farms and farming 1412
farmyard manure 55, 153, 252, 1344, 1677
Fate 247, 494, 934, 1395
Fate of Pollutants 4, 20, 108, 247, 331, 337, 542, 543, 544, 925, 1004, 1119, 1133, 1375, 1395, 1442, 1585
fauna 50
Feasibility Studies 1159
feather meal 1293
feathers 1293
fecal bacteria 1660
Fecal coliforms 372
fecal contamination 1107
feces 372, 1737
fecundity 533, 1319, 1387
federal government 827, 1759
federal programs 575, 1041
feed additives 8, 68, 244, 418, 547, 692, 843, 1044, 1191, 1293
feed conversion 203, 1191, 1460

- feed conversion efficiency** 1185, 1191
feed grains 244
feed intake 409, 1191, 1255
feed manufacturing technique modification 446
feeding 68, 148, 417, 1044, 1163, 1597
feeding behaviour 1711
feeding habits 175
feeding sites 823
feedlot manure management 257
Feedlot runoff---North America 283
Feedlot runoff---North Carolina---Measurement 360
Feedlot runoff---United States 1329
Feedlot runoff---United States---Management 859
feedlot wastes 149, 827
feedlots 149, 353, 1198
Feedlots---Environmental aspects---North Carolina 360
Feedlots---South Dakota 826
feeds 105, 148, 198, 203, 547, 985, 1028, 1038, 1044, 1157, 1163, 1190, 1204, 1208, 1237, 1246, 1255, 1297, 1416, 1490
Feeds---Congresses 1035
feedstock 1364
fell and burn 436
female animals 692
fenamidone: environmental safety, fungicide, mode of action, risk, strobilurin, synthesis 1603
fenitrothion 1135
fens 1346, 1634, 1789, 1800
Fenvalerate 542
Ferruginous hawk 424
fertigation 1345, 1482, 1710
fertilisers 829
fertility management 1027
fertilization 119, 989, 1189, 1642
fertilizer 571, 850, 1540, 1714
fertilizer application 548, 820, 1301, 1322, 1730
fertilizer efficiency 115
fertilizer industry 1675
Fertilizer industry---Great Britain---Management 751
fertilizer management 861, 897
fertilizer requirement determination 30, 720, 991, 995, 998, 1002, 1234, 1327
fertilizer requirements 1027
fertilizer use 116, 502
Fertilizers 26, 48, 105, 138, 160, 215, 222, 295, 426, 433, 474, 478, 481, 493, 499, 534, 543, 549, 550, 551, 579, 589, 591, 593, 612, 668, 677, 705, 719, 728, 784, 852, 869, 894, 991, 1003, 1011, 1033, 1065, 1093, 1157, 1174, 1184, 1208, 1235
Fertilizers (contd.) 1245, 1247, 1248, 1255, 1314, 1339, 1367, 1409, 1412, 1448, 1472, 1488, 1551, 1564, 1585, 1595, 1609, 1642, 1653, 1657, 1668, 1671, 1735, 1741, 1790
Fertilizers---Environmental aspects 790
Fertilizers---Environmental aspects---United States 1582
fiber content 692
field crops 319, 976
field experiment 1315
field experimentation 163, 212, 319, 824, 1490
field experiments 829
field hazards 1406
field level studies 1361
Field Method 731
field studies 553
fields 212, 1719
filter strips 1720, 1729
filtration 1180, 1575, 1645
fine particles: erosion leaching 1692
fine sand 1509
fine sediment 165
Finland 369, 677
Fire 201, 565
fire ecology 340, 1698
fire effects 140, 821, 1698
fire management 408
Fires 340, 424, 565
Fish 88, 102, 166, 438, 463, 565, 630, 701, 804, 814, 961, 1094, 1352, 1618, 1638
Fish culture 231, 432, 1223
fish kills 714
Fish Management 1411
fish passage 1676
fish (Pisces) 166, 814, 1352, 1618
fish (Pisces): alien species, egg, freshwater species, larva 701
fish (Pisces): habitat couplers, omnivore 630
fish (Pisces Unspecified) 113, 146, 165, 463
Fish ponds 1184
Fish Populations 1403
fisheries 500
Fishery conservation 270
Fishery management 566, 804, 1223, 1411, 1462
fishes 711, 1396, 1700
Fishing 1411
fitness 590
flea beetles 563
Flexuosa I trin 423
flight 691
flocculation 719
flood 1764
flood control 567, 569, 725, 1311, 1680, 1765
flood events 694, 801
Flood forecasting 1377
flood plains 658, 1358
flooded rice 897, 1247, 1790
flooding 205, 453, 478, 600, 933, 941, 993, 1247, 1346, 1481, 1691
Floodplain ecology---North America 568
floodplain gravel pits 654
floodplain landforms 334
floodplain management 1680
floodplain sedimentation 1267
floodplain stratigraphy 24
floodplain systems 1451
floodplain woodlands: restoration 694
floodplains 1267, 1350, 1430, 1437, 1441, 1450, 1720
floods 24, 205, 320, 725, 794, 1427, 1446
floriculture 774
Florida 441, 673, 903, 1680
flow 389, 924, 1404
flow duration 569, 710
flow hydraulics 806
flow regimen 701
flow regimes 603
flow regulation 1451
flow resistance 1276
flow velocity 806
flowing waters 1068
fluctuating stressors 1476
Fluctuations 900
fluid flow 1615
fluid mechanics 924
flume experiments 1509
fluoroquinolone enrofloxacin 1152
fluvial action 801
fluvial competence 603
fluvial ecosystems: water use legitimization 809
fluvial geomorphology 603
fluvial island formation: flooding 1242
Fluvial morphology 890, 1676
fluvial processes 806
fluvial sandstone 1509
Fluvial Sediments 1239, 1724
fodder crops 534
fog 134, 1051
foliar application 1345
fonofos: volatilization 886
food 153, 1613
food acceptability 746
Food animals---Nutrition---Congresses 1035
food biosecurity 320
food chains 130, 438, 685, 721, 730, 1093, 1150, 1343, 1708
food contamination 208, 1291, 1379, 1736
food crops 77
food industry 142, 1736
food processing 1730, 1736
food production 128, 264, 320, 475, 612, 1736
food productivity 470
food resources 814

Subject Index

- food safety** 746, 1448, 1736
Food Science 860
food security 612, 1571
food supply 320, 823
food web interactions 1110
food web stability 630
food web structure 630, 701
food web structures 1340
food webs 148, 605
foods 130, 148, 377
forage 6, 203, 534, 769, 1255, 1460, 1490, 1666
Forage plants---Congresses 572
forages 860
foraging 212
Foraging behaviour 37
forb (Angiospermae): food 823
forest clearing 1625
forest decline 333, 907
forest ecology 99, 120, 174, 400, 577, 579, 584, 711, 773, 815, 821, 1022, 1081, 1083, 1089, 1433, 1481, 1515, 1583, 1698
Forest ecology---United States 578
forest ecosystem 989, 1725
forest fires 120, 333, 425, 539, 565, 821, 1390
forest health 216, 333, 907, 1467, 1515
forest industry 324, 415, 426
forest influences 526, 1312, 1350, 1624
forest inventories 1492, 1647
forest litter 384, 436
Forest management 99, 120, 225, 415, 424, 425, 426, 441, 484, 488, 573, 579, 592, 627, 711, 757, 773, 815, 821, 1045, 1282, 1317, 1350, 1441, 1467, 1492, 1515, 1568, 1584, 1624, 1698, 1708, 1716, 1752
Forest management---Research---Arizona 1333
Forest management---Research---New Mexico 1333
Forest management---United States 960, 1019
forest plantations 99, 127, 484, 488, 530, 573, 579, 1317, 1624, 1667
forest policy 1350
forest productivity 764
forest recreation 333
forest resources 584, 1350, 1433
forest soils 371, 425, 627, 640, 818, 1624
forest trees 488, 757, 1089, 1481, 1604, 1667, 1752
forestation 1352
forested catchments 1729
Forested depression wetland 234
Forested wetlands---East---United States---Management 1432
Forested wetlands---Management 1022, 1583
forestry 324, 366, 463, 464, 552, 576, 640, 723, 811, 938, 1025, 1216, 1681
forestry area 396
forestry development 1350
forestry method 723
forestry practices 88, 526
forests 54, 76, 96, 120, 184, 216, 371, 441, 488, 517, 526, 565, 573, 575, 627, 640, 658, 757, 796, 895, 899, 931, 999, 1081, 1089, 1317, 1351, 1378, 1390, 1427, 1456, 1467, 1584, 1612, 1624, 1681, 1691, 1708, 1716
Forests and forestry 574
formulations 163, 173, 1091, 1681
fossil fuel waste disposal 487
fragaria 1773
fragmentation 50, 815, 1716, 1726
France 170, 369, 1575
Frankia 10
frankliniella occidentalis 774
frequency distributions 665
Fresh water 171, 685, 809, 1643
fresh water wetlands 1267
freshwater 184, 364, 565, 1287, 1461
freshwater aquatic systems 674
Freshwater crustaceans 1343, 1638
freshwater ecology 175, 234, 247, 376, 399, 500, 598, 649, 712, 813, 963, 1057, 1068, 1635
freshwater ecosystems 1352, 1648
freshwater environments 62, 148, 685, 964, 1073, 1580, 1638
freshwater fish 565, 566, 804, 1462, 1638
freshwater fishes 210, 270
Freshwater invertebrates---Ecology---North America 772
Freshwater molluscs 1638
Freshwater organisms 148, 1597
Freshwater pollution 20, 75, 112, 139, 148, 162, 205, 247, 263, 322, 324, 335, 347, 349, 372, 378, 412, 413, 415, 426, 432, 433, 442, 494, 544, 666, 683, 696, 833, 923, 928, 1015, 1030, 1034, 1057, 1116, 1117, 1124, 1135, 1147, 1150, 1159, 1162, 1235, 1314, 1334, 1343, 1358, 1362, 1373, 1395, 1403, 1412, 1419, 1445, 1464, 1579, 1580, 1600, 1615, 1645, 1695, 1735, 1782, 1791
Freshwater productivity 718
Freshwater weeds 1735
freshwaters 1487
fruit trees 745, 747, 1345
fruits 1345, 1367, 1590, 1614
fuel 1093
fuel appraisals 1349, 1698
fuel consumption 1627
fuel crops 1394
fuels 26, 1208, 1324, 1390
Fulica americana 1469
fulvic acids 1067
fumigant 45
fumigated soil 704
functional couplings 813
funding 592
fungi 55, 114, 115, 116, 152, 186, 553, 670, 697, 814, 851, 909, 968, 1342, 1362, 1479, 1575, 1619
fungi (Fungi) 553, 814, 909
fungi (Fungi): decomposer, lignolytic, xenobiotic degrading microorganism 670
fungi (Fungi): plant pathogen 968
fungi (Fungi Unspecified) 851, 1619
fungicide: compost chemistry, degradation, pesticide 1047
fungicides 1290, 1717
fungus (Fungi Unspecified) 1619
fungus gloeophyllum striatum 1152
furrow irrigation 855
furrows 1031, 1231
future planning 1334
fuzzy logic 1128, 1196
fuzzy set theory 597
Fuzzy Sets 141
Galliformes 204, 1208, 1399, 1706, 1741
Gallus 204, 1208, 1399, 1706, 1741
game animals 197, 650
game birds 197, 1727
gamma hexachlorocyclohexane 1658
Garlon 3A 1397
gas chromatography 1056, 1289, 1574, 1593, 1654
gas exchange 133
gaseous phase 1051
gases 294, 464, 722, 1003
Gastropoda 1101
GC 1289
gene expression 479, 1700
gene flow 479, 599
gene transfer 1175
General 900, 1633
General Environmental Engineering 193, 222, 493, 1167, 1659
generalized likelihood uncertainty estimation 1096
generalized sensitivity analysis 927
genes 941
genetic algorithm 1061
genetic control 196
genetic diversity 155, 653, 1058, 1700
genetic engineering 196, 197, 223, 363, 377, 474, 599, 730, 743, 1168, 1175, 1457
genetic improvement 361, 612, 1033, 1174, 1336

- genetic regulation** 941
genetic resistance 612, 730, 941, 1175, 1321, 1341, 1576, 1717
genetic variation 729
genetically modified crops 473
genetics 1511, 1781
genotype mixtures 1667, 1771
genotypes 310
Geochemistry 413, 617, 1791
Geochemistry of sediments 416, 1782
geographic differences 863
geographic distribution 1347
Geographic information systems 324, 943, 1061, 1377, 1776, 1780
Geographic information systems---West (United States) 780
geographical distribution 80, 89, 340, 770, 1317, 1510
geographical information systems 246, 441, 539, 998, 1203, 1234, 1331, 1435
geographical variation 66, 325
Geohydrologic Units 617
Geologic Time 20
geological sedimentation 500, 629, 1548, 1549, 1674, 1688, 1697
geology 246, 340, 602, 617, 1314
geometry 345
geomorphic thresholds 603
geomorphological processes 694
geomorphology 303, 307, 617, 656, 658, 806, 1226, 1431, 1672, 1720, 1724
Geophysical prediction 1224
George E Brown, Jr. Salinity Laboratory, Soil Physics and Pesticide Research Unit 1562
Georgia 441
geosmin: production 909
geostatistics 246, 665
Germany 277, 455, 483, 1046, 1304, 1308
germplasm 361, 474, 1063
Giardia 351, 541, 1097, 1103, 1757
GIS 577
Glaciers 1634
Glass 501
GLEAMS Model 542
global atmospheric change 634
global C cycle 311
global carbon cycle 898
global change 7
Global Energy and Water Cycle Experiment Program [GEWEX Program] 1307
global methane emission 1085
global positioning systems 505, 1234
global threat 1487
global use 1070
global warming 58, 141, 481, 551, 1005, 1404, 1592, 1636
Glutathione 152, 1469
Glycine 275, 319, 852, 855, 1264, 1640
Glycine max 275, 319, 523, 606, 691, 852, 855, 1082, 1264, 1640
Glycine max (Leguminosae) 724
glycophytes 1490
glyphosate 398, 606, 1112, 1768
glyphosate herbicide: pesticide, soil pollutant, toxin 1725
glyphosate [Rodeo formulation]: accidental overspray, efficacy, enzyme inhibitor, herbicide, over water uses, soil pollutant, toxicodynamics, toxicokinetics, toxin, water pollutant 396
goats 609
Golf courses---United States---Management---Handbooks, manuals, etc 775
Gossypium 282, 700, 788, 1077, 1602
gossypium hirsutum 394, 776, 1205, 1288, 1488
government 1515
government organizations 1612
Government policies 816, 939, 1034, 1443
government policy 41, 612, 706, 816, 1076
Government programs 575, 1076
Government publications 420
Government regulations 1379
governmental programs and projects 80, 81, 1259, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1740
Gradients 1510
grain crops 1174
grain legumes 692, 810, 1643
grains 677
grains (Gramineae): deep rooted, small 1692
Gram Negative Aerobic Rods and Cocci 90
Gramineae (Gramineae) 850
graphic models 449
grass filters 1278
grass (Gramineae) 823
grass (Gramineae): alien species, exotic pasture species, insolation, proliferation 701
grass strips 865, 1031, 1298, 1454
Grassed waterways 1438
Grassed waterways---United States 1320
grasses 6, 319, 1666, 1720
grasshoppers 89, 477
grassland condition 1276
grassland improvement 6
grassland management 11, 76, 210, 486, 769, 845, 856, 1422, 1429, 1520, 1604
grassland soils 7, 720
grasslands 6, 11, 19, 76, 340, 388, 395, 486, 517, 534, 549, 689, 690, 769, 845, 856, 899, 1194, 1276, 1367, 1378, 1422, 1429, 1520, 1691
gravel bed rivers 345
gravel loss 654
gravel mining 654
grazed grassland 1006
grazer assimilation 1618
grazing 6, 76, 104, 210, 303, 333, 388, 395, 409, 414, 485, 534, 609, 668, 690, 757, 769, 824, 850, 856, 1422, 1424, 1429, 1460, 1486, 1519, 1520, 1587, 1604, 1616, 1743
Grazing districts---New Mexico---Planning---Citizen participation 1498
grazing effects 76, 1521
Grazing---Environmental aspects---United States 610, 639
Grazing---Idaho---Management 626
grazing intensity 757, 823, 1521
grazing management 807
grazing systems 210, 845, 1200, 1424, 1429, 1460, 1604, 1666
grazing trials 757
great basin rangeland 669
Great Lakes 1076
Great Plains States of USA 382, 607, 852, 995, 1264, 1566
Green manure crops---United States 1079
green manures 117, 156, 157, 212, 309, 591, 652, 784, 810, 1007, 1020, 1082, 1245, 1557
green revolution 473, 612
greenhouse crops 735, 774, 1405
greenhouse culture 615, 705, 735
greenhouse effect 311, 604, 900, 1005, 1338
Greenhouse effect, Atmospheric---United States 771
greenhouse gas 525, 898
greenhouse gas emission 614
greenhouse gas emission mitigation potential 456
greenhouse gases 49, 453, 493, 652, 900, 1004, 1005, 1229, 1541
Greenhouse gases---United States 771
Greenhouse plants---Irrigation 1733
greenhouses 454
greentree reservoir management 1176
ground cover 117, 1009, 1082, 1276, 1480
ground cover plants 1720
ground layer vegetation 641
ground water 801, 951, 1362, 1655

Subject Index

- groundwater** 1, 20, 47, 138, 205, 276, 350, 351, 587, 594, 616, 617, 619, 620, 653, 671, 681, 682, 683, 855, 892, 948, 982, 997, 1014, 1018, 1041, 1046, 1145, 1241, 1288, 1301, 1339, 1362, 1378, 1424, 1491, 1609, 1634, 1752, 1789
- groundwater aquifers** 1451
- groundwater contamination** 337, 923, 1124
- groundwater discharge** 1348
- groundwater extraction** 333
- groundwater flow** 246, 618, 619, 933, 1491
- groundwater level** 441
- Groundwater---Microbiology** 912
- Groundwater---Microbiology---Laboratory manuals** 912
- Groundwater---Mississippi River---Watershed---Quality** 1742
- groundwater movement** 205, 988
- Groundwater Pollution** 20, 35, 47, 138, 337, 390, 587, 618, 681, 683, 833, 919, 923, 924, 993, 997, 1005, 1013, 1017, 1018, 1037, 1041, 1046, 1049, 1065, 1117, 1119, 1124, 1135, 1136, 1141, 1164, 1235, 1314, 1362, 1402, 1445
- Groundwater---Pollution---Middle Atlantic States** 979
- Groundwater---Pollution---United States** 957, 980, 1042, 1138, 1139, 1140, 1329
- Groundwater---Quality---Research--United States** 1562
- Groundwater recharge** 369, 1235, 1378, 1478, 1749, 1751
- Groundwater---United States** 1796
- groundwater zones** 100
- groundwaters** 800, 1487
- growing finishing pigs** 1359
- growing media** 735, 1699
- growth** 309, 310, 442, 534, 579, 621, 770, 784, 821, 899, 937, 1166, 1225, 1266, 1385, 1488, 1549, 1602, 1666, 1699
- growth models** 937, 1771
- growth performance** 1475
- growth period** 1002, 1082, 1247, 1737
- growth promoting substances** 446
- growth rate** 1002, 1344, 1444, 1624
- guidelines** 376, 518, 638, 961, 1163, 1263, 1367, 1564, 1620, 1771
- Guilds** 148
- Gulf of Mexico** 817, 1301
- gullied land** 629, 1276
- gymnosperms** 234, 429, 463, 573, 641
- gypsum** 6, 142
- habit** 1458
- Habitat** 37, 234, 565, 576, 689, 804, 1223, 1411, 1597, 1676, 1726, 1814
- habitat alteration** 1636
- habitat availability** 1110
- Habitat changes** 37, 598
- Habitat community studies** 62, 184, 438, 565, 649, 658, 770, 900, 1030, 1223, 1233, 1346, 1493, 1634
- habitat coupling** 630
- habitat creation** 395
- habitat degradation** 814, 1352, 1453
- habitat destruction** 140, 377, 395, 500, 1456, 1625
- habitat disturbance** 1625
- Habitat---Ecology---Modification---United States---Case studies** 288
- habitat flow relationships** 1223
- habitat fragmentation** 795, 1319
- habitat improvement** 1435, 1814
- Habitat improvement (fertilization)** 1184
- habitat modification** 630
- Habitat preferences** 477
- habitat protection** 1781
- habitat quality** 165, 1296, 1352, 1781
- habitat restoration** 395
- habitat selection** 174, 598, 1357, 1814
- habitat structure** 701
- habitat type** 1110
- habitat types** 603, 1250
- Habitat utilization** 37
- habitats** 50, 102, 118, 140, 153, 155, 174, 175, 207, 210, 212, 365, 398, 399, 400, 484, 565, 711, 717, 796, 815, 821, 824, 976, 1045, 1232, 1243, 1396, 1411, 1456, 1457, 1494, 1515, 1597, 1647, 1708, 1716, 1718, 1785, 1812
- habits** 749
- half life** 640, 908
- Haliaeetus leucocephalus** 424, 1373
- halogenated compound: pollutant** 93
- halophytes** 1205, 1490, 1510
- HAPS** 457
- hardwoods** 436, 641
- Harlequin duck** 424
- harmful algal blooms** 800
- harvesting** 426, 1268, 1394, 1467, 1624
- harvesting date** 36, 1247, 1812
- hay** 6
- Hazard** 685
- hazard assessment** 322, 636, 1445
- hazardous waste** 185
- Hazardous wastes** 635
- hazards** 1390, 1445
- headcuts** 805
- headwater streams** 389
- health** 1163, 1255
- health concerns** 172
- health foods** 224
- health hazards** 123, 448, 638, 1195
- health protection** 961
- Health risk assessment** 251
- health risks** 1107, 1679
- heat** 443, 1009
- heat sums** 1060
- heat tolerance** 1488
- heathland** 395
- Heaths** 689
- heavy metals** 148, 164, 256, 428, 435, 483, 602, 721, 783, 827, 919, 1169, 1172, 1187, 1202, 1297, 1403, 1419, 1457, 1530, 1555, 1652, 1690, 1720
- heavy metals: binding, degradation, pollutant, toxin** 187
- heavy metals: pollutant** 1170
- hedges** 717, 936
- helianthus** 407, 995
- Helicoverpa (Lepidoptera): agricultural pest** 1673
- Helminths** 766, 814, 1107
- helminths (Aschelminthes)** 1107
- hemilena oliviae** 89
- Hemiptera (Hemiptera)** 1635
- Henry's law constant** 135
- hens** 418, 1415
- Hepatitis D virus** 452
- herbaceous plants** 1720
- herbaceous understories** 823
- herbicide** 327, 1619
- herbicide: compost chemistry, degradation, pesticide** 1047
- herbicide: discovery, fate, resistance** 643
- herbicide dissipation** 1397
- herbicide: endocrine disruptor, enzyme inhibitor, toxicity, usage, resistance** 1130
- herbicide: herbicide** 755
- herbicide residues** 168, 671, 1083, 1132, 1136, 1290, 1555
- herbicide resistance** 593, 606, 1112, 1689
- herbicide resistant weeds** 221, 365, 593, 1112, 1458, 1511, 1689
- Herbicides** 3, 4, 6, 168, 177, 231, 358, 377, 593, 642, 671, 683, 758, 833, 852, 1083, 1093, 1123, 1131, 1132, 1133, 1134, 1135, 1136, 1169, 1173, 1245, 1290, 1304, 1395, 1448, 1458, 1637, 1650, 1689, 1720, 1767, 1768, 1769, 1770
- Herbicides---Environmental aspects---United States** 373
- herbicides: pollutant, toxin** 641
- herbivores** 118, 579, 757, 770, 1073, 1521
- heterogeneous sediment** 1509

- heterosis** 361
hexachlorobenzene 1658
hexazinone 542, 640
Hibiscus esculenta [Chinese whitebage] (Malvaceae): vegetable crop 254
hierarchical structures 794
high density planting 1345
high performance liquid chromatography 1289, 1593
high performance thin layer chromatography 1291, 1593
high water tables 1141, 1288
high yielding varieties 612, 744
higher plants (Tracheophyta) 55
highly digestible raw feed materials 446
Himantopus mexicanus 1469
Histopathology 1469
historical account 649, 1411, 1695
historical perspective 1158
history 530, 602, 653, 679, 740, 745, 768, 776, 1058, 1175, 1712, 1800
Histrionicus histrionicus 424
home gardens 552, 1667
Hominidae 321, 376, 969, 1097, 1103, 1736
Hominidae (Hominidae) 468, 783, 789, 1123
hordeum vulgare 1488
horizons 1549
hormones 545, 651, 1732
horticultural crops 937, 1063
horticultural systems 1374
horticulture 255, 1216, 1236, 1483
Horticulture (Agriculture) 513
host pathogen interaction 240
host plants 117, 758
host specificity 1361
hosts of plant pests 1557
Howard A. Schneiderman 731
HPLC 1258, 1289, 1593
human activities 166, 487, 674
human activity 58, 88, 500, 602, 603, 1427, 1639, 1690
human consumption 783
human diseases 321, 322, 376, 636, 969, 1097, 1249, 1736
human drugs: detection, environmental fate, extraction, pharmaceutical, pollutant, sediment content, sludge content, soil content, soil pollutant 471
human exposure 468, 789
human factors 1401
human health 458
human health assessment 597
human (Hominidae) 504, 764, 914, 948, 1109, 1270, 1487, 1772, 1808
Human impact 424, 1123, 1352
Human pathogens 635
Human Population 799, 1249
Human Population Atmosphere Interactions 493
Human Population Biosphere Interactions 1726
human pressure 1487
human sources 1675
human toxicity 123
human wastes 372
humans 372, 468, 504, 764, 783, 789, 914, 948, 1109, 1123, 1270, 1487, 1772, 1808
humic acids 3, 1067
Humic matter 3
humic production 1340
humid temperate zone 803
humidity 118, 1129
Humpty Dumpty model 1431
humus 7
hunting 862
Hyalella azteca 1648
Hybridization 770
hydraulic conductivity 558, 659, 677, 719, 930, 1096, 1304, 1385, 1483, 1714
hydraulic loading rate 532
hydraulic structures 939, 1380, 1446
Hydraulics 569, 617, 939, 1310, 1312
Hydric soils 1792
Hydrilla verticillata 1073, 1735
Hydrocarbons 1078, 1167, 1362
hydrocarbons: pollutant 967
Hydrodynamics 378, 927, 1724
hydroecology 1267
hydroelectric plants 569, 1076
hydrogen 1303
hydrogen ion concentration 263, 1634
hydrogen ions 1490
hydrogen peroxide 581, 674
hydrogen sulfide 1359
hydrogeology 246
hydrogeomorphic indexes 752
hydrogeomorphic units 246
Hydrologic Aspects 1363
hydrologic cycle 320, 936
Hydrologic Data 503, 1363
hydrologic factors 1720
Hydrologic models 415, 1012, 1377, 1495
hydrologic system 1126
Hydrologic Systems 1150
hydrologic unit area projects 1164
hydrological factors 1276
hydrological pathways 736
hydrological processes 659
Hydrological Regime 1638
hydrological systems 1348
Hydrology 20, 79, 246, 275, 340, 400, 415, 441, 543, 569, 598, 602, 611, 616, 629, 656, 658, 682, 685, 688, 694, 770, 799, 806, 814, 833, 933, 964, 982, 997, 1039, 1150, 1227, 1233, 1239, 1310, 1347, 1363, 1392
Hydrology (contd.) 1427, 1491, 1495, 1615, 1616, 1630, 1634, 1657, 1719, 1724, 1764, 1765
hydrology: global, regional 1307
Hydrology, Rangeland---United States---States 760
Hydrology---White River---Ark and Mo 323
hydrolysis 4, 100, 439, 1125, 1255
hydroperiod 520
Hydrosphere 1150
hydroxide radicals 1658
hydroxyl radicals 674
hydroxylamine 581
hygiene 750
hypereutrophic lake 1468
hyporheic zones 801
hypoxia 817, 1301
Hypoxia---Water---Mexico, Gulf of 420
ice effects 498
Idaho 537, 1349
identification 457, 592, 993, 1118, 1413, 1457
Identification of pollutants 75, 108, 137, 162, 347, 349, 351, 666, 833, 1379, 1646
Illinois 319, 1566, 1764
imazapyr 640
immobilization 720, 869, 987, 991, 1202, 1376, 1652
immunity 432, 1121
immunoassay 351, 666, 1289
immunoassays 666
immunocompetency 1475
immunology 432, 666
immunoproteins: synthesis 1475
immunotoxicity 1121
impact 676, 710, 1078
impacts 860
impoverishment 1352
improved exclosure placement 1431
improved technologies 704
improvement 521
improvement proposals 915
in vitro assay: analytical method 675
inbreeding depression 512
Incineration 1528
income 1270
incorporation 1156, 1219, 1304, 1318
incubation time 915
index 1758
index of biotic integrity 752
indexes 124, 170, 1156, 1561, 1647, 1693, 1719
indicator organism 348
indicator organisms 1072
indicator species 139, 162, 168, 181, 341, 347, 349, 592, 907, 919, 976, 1169, 1457, 1467, 1516

Subject Index

- indicators** 94, 105, 139, 356, 518,
 592, 627, 792, 1201, 1365,
 1584, 1620, 1693, 1728
Indicators---Biology---United States
 161, 489, 1704, 1705, 1713
indigenous communities 1476
indoor air quality 1109
Induce: pesticide, surfactant 396
industrial effluents 1115, 1536
Industrial management 32
Industrial pollution 1403
industrial sites 1457
industrial waste management 764
Industrial Wastes 32, 112, 162,
 920, 1090
Industrial Wastes Treatment 32,
 501
Industrial Wastewater 1735
industry 1629
industry trends 80
infectious diseases 149
infestation 821
infiltration 36, 94, 301, 303, 507,
 542, 558, 611, 722, 788, 935,
 972, 973, 1194, 1240, 1298,
 1304, 1392, 1483, 1513, 1519
infiltration (hydrology) 1720
infiltrometers 558
information 365, 382, 1612
information needs 691, 1112,
 1332, 1576, 1612
information sources 1720
information systems 492, 944,
 1334, 1377
information technology 1203
Ingestion 130
inherited features 802
inhibition 310, 834, 899, 1002
inland aquatic ecosystems study
 1068
inland water environment 685,
 1580, 1581, 1634, 1638
innovation adoption 106, 606, 750,
 841, 1028, 1263, 1671
inorganic fertilizers: excessive use
 1552
inorganic phosphate 1468
input output analysis 409
insect chemical communication
 727
insect communities 399
insect control 212, 282, 700, 741,
 774, 839, 1175, 1387, 1671
insect herbivore interactions 238
insect (Insecta): food, prey 823
insect (Insecta): herbivore, pest
 1552
insect (Insecta): pest 220, 727
insect (Insecta Unspecified) 1463,
 1619
insect pest resistance 1673
insect pests 49, 89, 196, 197, 212,
 238, 282, 333, 391, 479, 563,
 700, 741, 747, 821, 839, 970,
 975, 1175, 1671
Insect Science 731
Insecta 148, 387, 506, 651, 738,
 1074, 1193, 1342, 1473, 1577,
 1659
Insecta (Insecta Unspecified) 234,
 728, 1463, 1619
insecticidal action 479
insecticidal properties 730
**insecticide: compost chemistry,
 degradation, pesticide** 1047
insecticide residues 479, 671,
 1290
insecticide resistance 479, 675,
 700, 729, 1341
**Insecticide Resistance
 Management** 731
insecticides 186, 247, 265, 477,
 671, 675, 700, 747, 758, 776,
 1135, 1290, 1343, 1512, 1681
Insects 49, 177, 197, 216, 220, 235,
 387, 399, 438, 466, 667, 691,
 727, 728, 729, 732, 814, 823,
 968, 1073, 1193, 1406, 1463,
 1552, 1619, 1635, 1649, 1671,
 1673, 1693, 1807
insects (Insecta) 667, 814, 1649
insects (Insecta): pest 968
insects (Insecta Unspecified) 234
instream flow 569, 685
**Instrumentation and process
 engineering** 666
Instruments 1128, 1516
integrated control 173, 358, 387,
 738, 740, 744, 747, 749, 754,
 758, 1074, 1313, 1577, 1590,
 1689, 1767, 1770
integrated horizontal flux 916
integrated management 736
integrated management systems
 1619
integrated pest management 12,
 14, 163, 196, 221, 235, 265,
 309, 310, 325, 365, 391, 397,
 398, 458, 595, 606, 615, 691,
 693, 700, 731, 734, 735, 740,
 741, 742, 743, 744, 745, 746,
 747, 750, 758, 769, 774, 776,
 786, 811, 839, 975, 976, 1058,
 1075, 1175, 1206, 1263, 1285,
 1308, 1313, 1321, 1341, 1387,
 1444, 1447, 1458, 1463, 1465,
 1590, 1637, 1689, 1771, 1773
**integrated pest management: crop
 rotation** 31
**integrated pest management: pest
 control method** 31
integrated pollution prevention
 597
Integrated solid waste management
 733
integrated systems 414, 530
integrated weed management 163,
 365, 1458, 1771
integration 203
intensification 474
Intensity 1271
Intensity of precipitation 1271
intensive agriculture 456, 704
intensive cropping 846, 995, 1060,
 1336, 1417
intensive farming 105, 325, 474
intensive husbandry 363, 869
intensive livestock farming 647,
 1037, 1203, 1206
intensive production 12, 377, 756,
 1174, 1308
intensive silviculture 488, 1624
interactions 60, 117, 309, 399, 642,
 658, 759, 1089, 1183, 1318,
 1365, 1378, 1389
Interagency Cooperation 1073
intercropping 54, 118, 212, 530,
 668, 762, 841, 1496
interdisciplinary research 277,
 811, 1263, 1465
Interdisciplinary Studies 1435
Interfaces 1418
international collaboration 128
international cooperation 455, 493
international programs 1307
international trade 773
Internet 1334
interrill erosion 318, 715, 1542
interrill soil erosion 902
Interspecific relationships 598
introduced species 197, 333, 500,
 747, 770, 1073, 1276, 1638
inundation forest 1267
invasion 94, 333, 769
**Invasive plants---West---United
 States** 178, 713
invasive species 485, 1250, 1259,
 1276, 1808
invasive taxa 770
inventories 154
Invertebrata 130, 433, 565, 1101
**Invertebrata (Invertebrata
 Unspecified)** 165, 348
invertebrate (Invertebrata) 801
**invertebrate (Invertebrata
 Unspecified)** 165, 348
invertebrates 49, 113, 118, 130,
 166, 168, 177, 202, 216, 220,
 234, 235, 321, 348, 350, 354,
 370, 433, 466, 541, 553, 558,
 667, 691, 727, 728, 729, 755,
 758, 766, 801, 814, 823, 851,
 910, 968, 969, 1088, 1097,
 1103, 1107, 1201, 1285, 1303,
 1304, 1406, 1461, 1463, 1494,
 1552, 1587, 1590, 1619, 1635,
 1648, 1649, 1671, 1673, 1693,
 1807
investment 773, 1702
INW, Japan, Seto Naikai Sea 222
ion activity 719
ion transport 1490
ion uptake 1225
ions 1618
Iowa 138, 319, 516, 852, 1156,
 1357
IPM 238
iron 1368, 1468, 1479, 1785

- iron hydrous oxides 581
- iron: oxidation 1170
- irrigability surveys 1380
- irrigated conditions 993
- irrigated farming 44, 409, 782, 1380, 1739
- Irrigated farming---Economic aspects---West---United States 1754
- irrigated sites 782
- irrigated soils 450, 782
- irrigation 36, 44, 48, 92, 167, 215, 295, 320, 428, 465, 474, 508, 523, 543, 594, 612, 681, 782, 846, 849, 870, 937, 941, 1002, 1060, 1087, 1174, 1205, 1225, 1236, 1247, 1288, 1336, 1345, 1380, 1482, 1487, 1488, 1490, 1579, 1591, 1627, 1642, 1682, 1710, 1714, 1739, 1749
- Irrigation---Australia---New South Wales---Management 664
- Irrigation---Australia---New South Wales---Planning 664
- Irrigation---Australia---Victoria---Handbooks, manuals, etc 778
- Irrigation---Bibliography 1393
- irrigation channels 782, 1310
- Irrigation---Congresses 779
- Irrigation effects 1049
- Irrigation efficiency 460, 1393
- Irrigation---Environmental aspects 687
- Irrigation---Environmental aspects--United States 1284
- Irrigation---Environmental aspects--West (United States) 780
- Irrigation farming 777, 996
- Irrigation farming---Environmental aspects 777
- Irrigation farming---Environmental aspects---Developing countries 482
- Irrigation farming---Environmental aspects---United States 777
- Irrigation farming---United States 777
- Irrigation farming---West---United States 461
- Irrigation---Handbooks, manuals, etc 379
- irrigation management 22, 380, 528, 838, 844, 1621
- irrigation performances 781
- irrigation requirements 279, 1380
- irrigation scheduling 462, 1234, 1288, 1326
- irrigation systems 36, 92, 462, 465, 1286, 1380, 1756
- irrigation water 36, 369, 428, 462, 705, 782, 1063, 1182, 1205, 1288, 1469, 1488, 1621, 1653, 1734, 1739, 1747, 1748, 1749, 1750, 1751
- Irrigation water---Pollution---United States 1284
- Irrigation water---Pollution---West---United States 1709
- Irrigation water---United States 1284
- isoprenes: pollutant 967
- isoproturon 3
- Israel 369
- issues and policy 192
- Italy 369, 1046, 1255
- Japan 369, 1046, 1089, 1343
- journals 1335
- juvenile hormones 651
- Kaolinite 234
- Kaolinite dissolution 234
- Kentucky 6
- keratinase 1293
- ketones 1677
- KINEROS model 1764
- Kinetic Energy 1271
- Kinetics 544, 1115, 1162, 1271
- kiwifruit (Actinidiaceae) 1483
- knowledge 1531
- Kraft Mills 1403
- kresoxim methyl: environmental safety, fungicide, mode of action, risk, strobilurin, synthesis 1603
- kriging 246
- Kuwaiti oil fires 457
- labor 1247, 1444
- laboratories 925
- laboratory studies 553
- laboratory toxicity 1507
- lactuca sativa 705, 1715
- lacustrine sedimentation 109, 1383
- lagomorpha 1727
- Lagomorphs 1725
- lagoon effluent 714
- lagoons 1052, 1513
- lake 585
- lake catchments 1296
- Lake deposits 696
- Lake dynamics 649
- lake ecosystem 1356
- lake ecosystems 630, 1110
- lake limnology: suspended clay impacts 1618
- lake minnetonka 1397
- lake morphometry 1110
- lake restoration 696, 1212, 1340
- Lake Sediments 696, 1383
- lake types 1347
- lake water quality 1296
- lakes 41, 112, 486, 649, 696, 813, 961, 1068, 1100, 1383, 1386, 1580, 1645
- lakeshore restoration 128
- land 809, 817, 1600
- land application 32, 192, 1071, 1409
- land application of animal manure 69
- land banks 1234
- land clearance 551
- land degradation 40
- land development 415
- Land Disposal 191, 1442, 1528
- land diversion 40
- land management 94, 176, 200, 273, 340, 371, 485, 487, 530, 573, 579, 582, 607, 768, 792, 815, 816, 938, 971, 1241, 1338, 1452, 1500, 1501, 1502, 1503, 1536, 1539, 1571, 1599, 1620, 1630
- land mass cover 1761
- land policy 54
- Land pollution 38, 160, 186, 331, 337, 575, 1167, 1362
- land prices 769
- land productivity 1545
- Land Reclamation 1630
- land resources 88
- Land restoration 1630
- land spreading 1324
- land stewardship 43, 65
- land tenure 65, 1600
- land topography 812
- Land treatment of wastewater 1663, 1760
- land types 1548
- land use 7, 25, 38, 50, 52, 54, 88, 99, 107, 225, 342, 371, 390, 414, 415, 421, 464, 475, 481, 526, 530, 573, 629, 736, 768, 792, 799, 899, 950, 971, 1011, 1172, 1196, 1227, 1233, 1314, 1365, 1386, 1401, 1404, 1423, 1452, 1493, 1554, 1571, 1633, 1645, 1656, 1667, 1691, 1721, 1726, 1789, 1814
- land use change 389, 1189
- land use planning 50, 1350
- Land use surveys---United States 793
- Land use---United States Planning 1213
- landfill fires 457
- Landfills 191
- landform change 307
- landowners 65, 1600
- landscape 25, 52, 88, 105, 212, 520, 530, 629, 717, 769, 798, 1196, 1243, 1331, 1616, 1716
- Landscape architecture 291
- landscape cohesion 795
- landscape conservation 732, 1243
- Landscape ecology 98, 107, 155, 272, 665, 796, 800, 801, 815, 943, 1196, 1430, 1450
- landscape indicators 799
- landscape indices 795
- landscape mosaics 802
- landscape planning 795, 1729
- landscape properties 1110
- landscape science 794
- landscape sensitivity 24, 307, 802
- landscape setting 1250
- landscape stability 943

Subject Index

- landscape variables** 803
large rivers 605
large scale seasonal species shifts 122
Law 1442
Law, policy, economics and social sciences 227
lawns and turf 1478
laws and regulations 86, 458, 503, 625, 1423, 1504, 1505, 1506
leachates 445, 922, 947
leaching 47, 63, 105, 123, 147, 160, 224, 276, 375, 418, 440, 486, 494, 534, 540, 542, 587, 618, 642, 652, 653, 671, 677, 681, 683, 722, 726, 855, 861, 864, 869, 892, 947, 948, 990, 991, 993, 995, 997, 998, 1000, 1005, 1011, 1018, 1065, 1116, 1120, 1135, 1136, 1200, 1234, 1241, 1268, 1269, 1339, 1375, 1376, 1405, 1490, 1532, 1585, 1643, 1652, 1710
lead 148, 1688
leaf area 523, 1344
leaf area index [LAI] 812
leaf conductance 523
Leaf litter 1461
leaf temperature 523
leaf water potential 1288
leakage 1236
least bittern (Ciconiiformes) 667
leaves 523, 937, 1030, 1172, 1225, 1345, 1490, 1699, 1717
lectins: insecticide 1177
legal aspects 1215
legal review 1215
Legislation 222, 223, 271, 272, 407, 414, 939, 983, 1034, 1255, 1258, 1781
Legislation (on industry and trade) 939
Legislation (on water resources) 222
legislative guidance 1808
legumes 6, 591, 652, 784, 810, 1020, 1234, 1245
Length 1635
Lepidoptera 89, 207, 216, 533, 1193, 1726
Lepus spp. [hare] (Leporidae): bioindicator 1725
lethal effects 721
Lethal limits 1469
lethality 1476
Leucosticte atrata 424
levees 227
ley farming 311
leys: application timing, soil incorporation 785
lichen (Lichenes): bioindicator 169
life cycle 175, 1458
life history 1172, 1516, 1693
Life history modification 1635
life history stages 166
lifestyle 1693
light 478, 693, 1492, 1770
light attenuation 1618
light availability 1110
light intensity 735
Light Penetration 1670
light quality 701
light quantity 701
lime 719, 1159, 1448
lime: soil amendment 55
limestone dissolution 1479
liming 371, 579, 719, 869, 1642
liming materials 1653
limitations of modeling 389
Limiting factors 1418
limnological system properties 1618
limnology 605
Lindane 542
lindane: insecticide, pollutant, toxin 133
Linum usitatissimum (Linaceae) 716
Lipolexis scutellaris (Hymenoptera): biological control agent 235
liquid chromatography 75, 905, 1056, 1654
liquid-liquid extraction 1593
liquid manure 820, 1660
liquid manures 1572
liriodendron tulipifera 1045
literature data 785
literature databases 128
literature review 34, 108, 109, 110, 111, 205, 247, 263, 339, 347, 349, 351, 413, 426, 431, 434, 435, 492, 542, 544, 565, 635, 636, 721, 770, 918, 919, 920, 921, 922, 924, 925, 972, 973, 988, 1012, 1013, 1017, 1030, 1057, 1116, 1117, 1121, 1133, 1135, 1147, 1150, 1226, 1271, 1442, 1528, 1580, 1597, 1607, 1609, 1634, 1645, 1782
literature reviews 5, 8, 12, 14, 15, 19, 30, 33, 35, 36, 37, 41, 44, 50, 60, 62, 66, 89, 92, 94, 99, 105, 109, 112, 117, 123, 124, 140, 142, 149, 151, 154, 155, 163, 174, 175, 186, 196, 197, 200, 208, 210, 212, 215, 221, 224, 226, 231, 244, 247, 250, 265, 271, 272, 298, 302, 309, 310, 324, 325, 333, 339, 340, 341, 349, 356, 361, 363, 365, 372, 375, 377, 391, 393, 395, 398, 408, 411, 412, 413, 415, 418, 425, 426, 431, 432, 433, 436, 440, 441, 443, 445, 448, 450, 454, 464, 465, 474, 475, 478, 479, 484, 488, 511, 522, 523, 526, 544, 551, 563, 579, 584, 587, 588, 599, 602, 606, 612, 615, 618, 640, 642, 647, 649, 653, 678, 679, 681, 691
literature reviews (contd.) 692, 693, 705, 711, 715, 717, 719, 726, 730, 732, 735, 741, 742, 743, 744, 745, 746, 747, 750, 757, 759, 768, 769, 773, 774, 776, 782, 784, 792, 798, 805, 811, 821, 827, 834, 839, 846, 867, 869, 870, 874, 885, 899, 932, 933, 934, 935, 937, 941, 944, 961, 970, 971, 975, 976, 993, 995, 997, 998, 1002, 1007, 1009, 1018, 1020, 1030, 1033, 1045, 1058, 1060, 1063, 1067, 1081, 1098, 1101, 1112, 1113, 1117, 1118, 1120, 1121, 1122, 1131, 1132, 1136, 1150, 1154, 1157, 1166, 1169, 1174, 1175, 1180, 1185, 1198, 1199, 1201, 1202, 1205, 1206, 1209, 1225, 1232, 1236, 1247, 1263, 1269, 1276, 1281, 1286, 1288, 1291, 1293, 1308, 1310, 1313, 1317, 1321, 1335, 1336, 1341, 1345, 1349, 1350, 1365, 1376, 1387, 1391, 1400, 1401, 1402, 1416, 1424, 1433, 1441, 1444, 1448, 1452, 1457, 1458, 1460, 1465, 1470, 1478, 1480, 1481, 1488, 1490, 1493, 1510, 1515, 1518, 1521, 1522, 1533, 1542, 1549, 1553, 1555, 1556, 1557, 1564, 1567, 1570, 1572, 1576, 1578, 1580, 1591, 1608, 1620, 1627, 1629, 1637, 1647, 1653, 1666, 1667, 1675, 1677, 1698, 1708, 1710, 1715, 1716, 1717, 1727, 1735, 1737, 1739, 1748, 1749, 1750, 1751, 1768, 1771, 1782, 1789, 1790, 1793, 1800, 1809, 1812, 1813
litter 204, 545, 1030, 1399
litter plant 371, 384, 686, 1169, 1276
Liver 1469
livestock 6, 26, 197, 340, 363, 756, 769, 971, 1011, 1038, 1071, 1203, 1409, 1412, 1486, 1595, 1616, 1666, 1808
livestock buildings 69, 1359
livestock farming 66, 486, 673, 825, 1229, 1759
livestock feeding 82, 1038, 1759
livestock grazing 429
Livestock Housing 828
Livestock---Housing---Odor control---North Carolina 360
livestock impacts 803, 823
livestock (Mammalia) 55, 823, 863, 1052
livestock (Mammalia): grazer 1006
livestock (Mammalia Unspecified) 850, 948
Livestock Manure Handling---United States 268
Livestock---New Mexico---Management 1498

- livestock numbers** 827
livestock production 86, 807, 1730
livestock system sustainability 328
Loading 1314
loamy sand soils 993
local government 577
local planning 711
lodging 443, 612
logging 121, 333, 425, 426, 441, 1360, 1467, 1624
logging effects 592, 1360
logging roads 1317
logs 425
Lolium perenne (Gramineae): forage crop 716
Long term changes 1493
long term ecological vitality maintenance 809
long term experiments 14, 1355, 1422, 1642
long term exposure 423
long term research programs: development 1431
long term sustainability 1374
longevity 533, 1387
losses 72, 534, 786, 1060, 1161, 1255, 1304, 1416, 1545, 1564, 1643, 1657
losses from soil 30, 47, 226, 436, 453, 509, 540, 671, 726, 865, 868, 929, 950, 987, 990, 991, 993, 1000, 1031, 1120, 1156, 1160, 1164, 1194, 1234, 1268, 1269, 1298, 1376, 1386, 1549, 1563, 1710, 1715, 1719
lotic environment 165
Louisiana rice 897
low energy precision application 444
low input agriculture 325, 762, 1065, 1234, 1773
low temperature 1384
low temperatures 553
lowland areas 717, 846
Lumbriculus variegatus 1648
lycopersicon esculentum 705, 735, 1063, 1288
Lycopersicon esculentum [tomato] (Solanaceae): vegetable crop 254
Lysimeters 42, 1375, 1414
Lysiphebia japonica (Hymenoptera): biological control agent 235
Lythrum salicaria 770
Lythrum salicaria [purple loosestrife] (Lythraceae): biology, weed, management 179
Lythrum salicaria [purple loosestrife] (Lythraceae): weed 667
macro fauna 851
Macrofauna 148, 1461
Macroinvertebrates 148
macronutrients 483, 917
macrophyte (Plantae): production 1618
macrophytes 1159, 1201, 1695
macropore factors 276
macropore flow 933
macropores 558, 677, 1194, 1266, 1304, 1385, 1483, 1519
MADM 1443
magnesium 418, 1258
Maine 903
maintenance 292
maize 275, 319, 407, 589, 786, 852, 855, 1192, 1219, 1355, 1482, 1602, 1640
maize (Gramineae): grain crop 473
maize silage 409
Malathion 542
male animals 692
Mallard 1469
Malus pumila 741, 849, 1345
mammal (Mammalia): pest 1808
mammals 55, 104, 219, 252, 303, 321, 376, 446, 468, 504, 598, 764, 783, 789, 803, 823, 834, 850, 863, 876, 881, 914, 948, 969, 983, 984, 1006, 1052, 1097, 1103, 1109, 1123, 1191, 1255, 1270, 1297, 1303, 1422, 1429, 1475, 1484, 1485, 1487, 1520, 1604, 1725, 1736, 1772, 1808
mammeins: antifeedant, natural product 968
man 321, 376, 969, 1097, 1103, 1121, 1653, 1736
Man induced effects 62, 390, 799, 1346, 1401, 1411
management 37, 38, 48, 62, 68, 72, 147, 203, 225, 227, 228, 252, 342, 345, 389, 424, 499, 575, 619, 682, 689, 796, 804, 811, 816, 829, 835, 845, 864, 876, 878, 881, 882, 1014, 1024, 1221, 1223, 1278, 1282, 1337, 1339, 1411, 1429, 1443, 1444, 1561, 1568, 1572, 1633, 1726, 1743, 1748, 1752, 1758, 1769
management approach overview 659
management implications 1094
management model: REMM 327
Management of biological nitrogen fixation 591
management planning 918, 1215
management practices 104, 1052
management strategies 476, 675, 860, 989
management system diversity 1374
Management Systems 684
manganese 1479, 1785
manganese hydrous oxides 581
manganese: pollutant 674
mangrove leaf decomposition 354
Manitoba 1793
Manure 34, 70, 104, 499, 502, 860, 1161, 1184, 1248, 1409, 1412, 1660
Manure Application 684
manure dry matter weight [manure DM weight] 446
manure environmental pollution 983, 1594
Manure gases 248
Manure handling 258, 260, 703, 819, 1632
Manure handling---Congresses 572
Manure handling---Environmental aspects---Congresses 879
Manure handling---Equipment and supplies 1596
Manure handling---Saskatchewan 889
manure management 1281
manure management systems 1572
manure pollution 984
manure production 850
manure storage 548, 820, 884
manure storage structures 1402
manure storage systems 1052
manures 26, 66, 73, 83, 147, 195, 198, 212, 215, 252, 259, 294, 359, 363, 383, 414, 417, 451, 467, 534, 549, 550, 676, 682, 703, 719, 756, 784, 819, 829, 843, 864, 873, 876, 878, 881, 882, 893, 953, 985, 994, 1000, 1003, 1011, 1024, 1025, 1029, 1037, 1157, 1163, 1190, 1194, 1198, 1204, 1237, 1241, 1258, 1355, 1367, 1376, 1381, 1485, 1529, 1563, 1595, 1617, 1626, 1628, 1642, 1657, 1668, 1683, 1702, 1731, 1737, 1741, 1806
Manures---Environmental aspects---Congresses 879
Manures---Management 1632
Mapping 246, 450, 539, 665, 816, 1445, 1491
maps 246, 330
Marginal seas 222
marginal vegetation 909
Marine 1015
marine environment 339, 1396
marine environments 1094
Marine fisheries 435
marine fishes 1396
Marine life 435
Marine organisms 1516
Marine pollution 339, 435, 934, 1401, 1581
Marine sciences 222
marine sediments 986, 1152
marine water 1287
markers 1809
market competition 36
marketing 143
markets 451, 825

Subject Index

- Marsh plants---United States---**
Identification 1178
marsh wren (Passeriformes) 667
marshes 431, 1615
Maryland 577, 903, 1405, 1566
mass balance model 800, 1369
mass spectrometry 905, 1056, 1115, 1574
mass transfer 886
Massachusetts 903
Mathematical analysis 1271
Mathematical Equations 1226, 1271
mathematical modelling 1712
Mathematical models 9, 63, 92, 138, 160, 266, 440, 443, 450, 454, 523, 587, 691, 693, 811, 926, 928, 929, 930, 932, 934, 935, 940, 1096, 1196, 1235, 1266, 1294, 1367, 1495, 1549, 1647, 1774
mathematics 928
mating disruption 727, 1075
maturity stage 1460
maximum storage in root zone 1096
maximum yield 12, 612, 1058, 1166, 1174, 1490
Mayflies 148
meanders 890
measurement 42, 353, 450, 558, 1118, 1268, 1269, 1281, 1381, 1382, 1383, 1400, 1484, 1533, 1563, 1631, 1697
measurement bias sources 1374
measurement methods 100
Measuring Instruments 1383, 1414
Measuring methods 1235
Measuring techniques 339
Mechanical and natural changes 62, 324, 339, 390, 415, 426, 438, 493, 565, 685, 770, 799, 1337, 1418, 1615, 1735
mechanical weed control 1009
MED, Adriatic Sea 222
MED, Black Sea 222
Medicago sativa 6, 742, 1200
Medicago sativa (Leguminosae): forage crop 716
Medical & veterinary entomology 431
medicines 322, 349, 636, 833, 1121
meiobenthos 1607
Melaleuca quinquenervia 1073
mercury 1782
meso fauna 851
mesocosm replicability 1127
meta analyses 1431
meta analysis 376
metabolic activation 834
metabolic rate 701
metabolism 148, 600, 798, 834, 1118, 1125, 1168, 1187, 1255, 1290, 1469, 1607, 1814
metabolite 1397
metabolites 834, 1198
metal damaged lakes 1296
metal ions 759, 1168
metaldehyde 662
Metals 108, 113, 130, 167, 434, 544, 649, 922, 1090, 1167
metals: accumulation, bioavailability 1095
metals: solid phase forms 581
metamorphosis 442
metapopulation dynamics 520
metapopulation persistence 795
metapopulations 795
meteorological factors 1474
methane 56, 294, 414, 464, 481, 604, 867, 898, 899, 900, 1085, 1191, 1402, 1484, 1790
methane: control, emission 1303
methane: greenhouse gas 614
methane production 180, 659, 1191, 1484, 1790
Methane---Recycling---United States---Case studies 901
methanogen (Methanogenic Archaeobacteria) 1303
methanogenesis 898, 900
methanotrophic bacteria 899
methanotrophy 1790
methodological limitations 1536
methodology 11, 42, 120, 123, 170, 182, 367, 450, 455, 645, 662, 696, 704, 712, 848, 892, 907, 977, 1001, 1003, 1005, 1066, 1068, 1289, 1305, 1381, 1484, 1492, 1539, 1543, 1593, 1600, 1630, 1669, 1711, 1723, 1766, 1769
Methodology general 339, 342, 367, 696, 848, 1600
Methods 1128, 1516
Methods and instruments 75, 137, 347, 372, 511, 666, 1128, 1362, 1383, 1516, 1607, 1648
methyl bromide 45, 704, 1658
methyl bromide emission 327
methyl bromide: pollutant, soil fumigant 1254
methyl isothiocyanate 1658
methyl mercury 1580
methylisoborneol: production 909
methylmercury 1580
metolachlor 833
metolachlor: biodegradation, herbicide 152
metolachlor conformations 327
metolachlor: herbicide 908
metolachlor: herbicide, toxin, pollutant 134
metominostrobin: environmental safety, fungicide, mode of action, risk, strobilurin, synthesis 1603
Mexico 428, 768
Mexico, Gulf of 420
Mexico, Gulf of---Channels 420
Mexico, Gulf of---Nutrients 284
Michigan 903
Micro organisms 1650
microbe (Microorganisms) 410, 909
microbe (Microorganisms): diversity 187
microbes (Microorganisms) 1048
microbes (Microorganisms): diversity 531
microbes (Microorganisms Unspecified) 851
microbial activities 188, 910, 1522, 1543, 1785
microbial based feed additives 8
microbial biomass 311, 829, 987, 1536
microbial contamination 322, 349, 350, 372, 376, 541, 1038, 1097, 1297, 1736
microbial degradation 73, 151, 185, 186, 1078, 1395, 1522, 1578
microbial DNA: extraction, purification, sediment, soil 531
microbial dynamics 1364
microbial ecology 910, 1636
microbial effects 814
microbial flora 60, 226, 784, 947, 1578
microbial insecticides 196, 1681
microbial pathogen detection 1107
microbial pesticides 196, 223, 495, 1629, 1681
microbial residues 986
microbial transformation: aerobic, anaerobic 100
microbiological analysis 347, 1607
Microbiological Studies 1249, 1442, 1607, 1646
Microbiology 945, 1072
microclimate 212, 216, 443, 712, 1245, 1812
microclimate management 659
microcosm replicability 1127
Microcrustacean 1635
microencapsulation 1091
Microhabitats 216, 1223, 1317
microirrigation 462, 1166, 1345
micrometeorological measurements 916
micrometeorological method 1563
micrometeorology 70, 1563
microorganism (Microorganisms) 613
microorganism (Microorganisms Unspecified) 348
microorganisms 55, 85, 90, 114, 115, 116, 146, 152, 157, 181, 185, 186, 187, 200, 332, 336, 348, 349, 350, 354, 368, 370, 410, 433, 504, 531, 553, 613, 670, 681, 686, 691, 729, 814, 847, 851, 900, 909, 911, 968, 1048, 1107, 1110, 1125, 1177

- microorganisms (contd.)** 1303,
 1384, 1389, 1479, 1618, 1619,
 1649, 1650, 1662, 1694, 1732,
 1807
microorganisms (Microorganisms)
 504
**microorganisms (Microorganisms
 Unspecified)** 185
Microsporidia 452
Midwestern United States 525
Migration 1597, 1635
Migrations 1597
migratory birds 44
Migratory species 1676
**Milk composition, production and
 biotechnology** 195
milk production 104, 481, 1255
milk yield 417, 1191, 1416
milking 625
mine drainage 918, 919, 920, 921,
 922, 1419
mine spoil 1391
mine tailings 919, 920, 1419
Mine Wastes 918, 919, 921, 922
mineral industry 918, 919, 1419
mineral nutrition 600
mineral transfer 806
mineralization 5, 214, 695, 720,
 850, 910, 917, 987, 995, 1002,
 1020, 1030, 1118, 1209, 1376,
 1522, 1540, 1556, 1559, 1587,
 1643
minerals 661, 784, 920, 921, 922,
 1044, 1153
minimum tillage 279, 282, 407,
 671, 677, 749, 995, 1304, 1511,
 1768
minimum viable population size
 512
mining 176, 1368
Minnesota 88, 138, 852, 903, 1411
miridae 89
miscellaneous method 257
Mississippi 204, 788, 1306
Mississippi River 605, 817
Missouri 138, 788, 852
mite control 741
mites 563
mites (Acarina) 814, 1635
mitigation 227, 520
mixed conifer forests 429
mixed forests 436, 1427
Mixing 685
mixing depth 1618
mixture toxicity 1179
mode of action 231, 1341
mode of application 915
Model 525, 1729
model confirmation 927
model evaluation 1523
model studies 108, 160, 378, 492,
 542, 649, 685, 920, 924, 928,
 934, 936, 1012, 1013, 1030,
 1128, 1314, 1377, 1395
Model Testing 649, 1314
Modeling 928, 1061, 1764
**Modeling, mathematics, computer
 applications** 1443
modelling 1525
Modelling (Multivariate) 1314
Modelling (Pollution) 934
models 58, 91, 95, 106, 182, 236,
 353, 417, 507, 519, 539, 582,
 611, 618, 649, 928, 938, 944,
 950, 1003, 1014, 1367, 1385,
 1395, 1424, 1443, 1465, 1482,
 1548, 1657, 1674, 1765, 1766
Models And Simulations 141
modified storage proteins:
insecticide 1177
moisture source 498
molecular biology 504
Molecular Structure 942
molecular tracers 457
Molecules 942
Mollusca (Mollusca Unspecified)
 113
molluscs (Mollusca) 1649
Mollusks 113, 438, 814, 1635, 1649
mollusks (Mollusca Unspecified)
 113
monitoring 63, 94, 120, 154, 162,
 168, 170, 171, 173, 181, 182,
 216, 236, 321, 325, 326, 341,
 343, 349, 356, 435, 438, 466,
 505, 592, 599, 616, 618, 619,
 620, 627, 638, 645, 700, 767,
 792, 903, 907, 919, 938, 944,
 945, 969, 977, 997, 1012, 1013,
 1014, 1017, 1076, 1093, 1102,
 1134, 1135, 1164, 1169, 1201,
 1203, 1255, 1278, 1305, 1308,
 1326, 1328, 1345, 1371, 1372,
 1379, 1457, 1467, 1482, 1484,
 1491, 1492, 1515, 1539, 1566,
 1584, 1590, 1600, 1612, 1651,
 1665, 1674, 1681, 1690, 1691,
 1693, 1700, 1711, 1757, 1809
**Monitoring and Analysis of Water
 and Wastes** 75, 1363, 1413
**Monitoring, Biological--United
 States** 1705
Monitoring methods 1600
monocots 115, 128, 257, 473, 641,
 701, 716, 724, 823, 850, 1692,
 1768
monoculture 484
monogastric animal production
 1475
monoterpenes: pollutant 967
Montana 607, 903, 1349, 1566
Monte Carlo method 1096
Monterey pine 225
moorland 1800
moral values 250
morbidity 1772
morphodynamics 1509
mortality 166, 333, 442, 533, 694,
 1166, 1185, 1228, 1276, 1373,
 1387, 1458, 1469, 1772
mortality rate 701
mosquito control 431
Moths 1193
motion 345
mountainous areas 133
mountainous regions 665
movement 558, 619, 691, 1304,
 1315
movement in soil 123, 440, 558,
 587, 618, 798, 867, 947, 1131,
 1241, 1471
Movements 804
mowing 395, 788
mulches 36, 509, 788, 888, 1245,
 1304, 1366, 1470
mulching 15, 118, 509, 1009
multi component reactive transport
 1525
Multidisciplinary 897
multidisciplinary knowledge 809
multidisciplinary models 809
multiple interactive pathways
 1451
**Multiple use management areas---
 United States** 960
multiple use of resources 1215
multispecies testing 1128
Multivariate Analysis 171, 1314
murchison meteorite 986
Mussels 1638
mutagenicity 1476
Mycobacterium 351
**Mycobacterium avium
 (Mycobacteriaceae):
 disinfection resistance,
 pathogen** 370
mycoherbicides 163
mycorrhizal fungi 117, 589, 894,
 1216
**mycorrhizal fungi (Fungi):
 symbiont** 55
Myriophyllum spicatum 770, 1073
N methylcarbamate pesticides
 1289
N Methylcarbonate 1056
N2O emissions 897
naphthalene: pollutant 93
national parks 921, 1656
national programs 1307
**National Water Quality Assessment
 Program** 1388
**National Water Quality Assessment
 Program---United States**
 1069
**Native plants for cultivation---
 Northeastern States** 1783
natural aquatic habitat protection
 1361
natural channel design 1599
Natural disturbance 1726
natural enemies 238, 325, 615,
 730, 741, 747, 758, 776, 949
natural flow regime 809
**Natural landscaping---Northeastern
 States** 1783
natural products 220
natural rainstorms 902
natural regeneration 1045, 1317

Subject Index

- natural resource management** 53, 65
natural resources 341, 768, 1335, 1427, 1600
Natural resources---Chesapeake Bay Watershed---Md and Va 564, 1428
Natural resources surveys---United States 960
natural salt lakes 1487
natural selection 971
natural waters 413
nature conservation 41, 94, 98, 99, 120, 128, 154, 184, 271, 388, 395, 399, 466, 565, 579, 584, 592, 598, 599, 690, 796, 804, 815, 816, 856, 1045, 1098, 1233, 1243, 1317, 1332, 1346, 1351, 1433, 1452, 1456, 1467, 1486, 1493, 1510, 1584, 1597, 1600, 1638, 1752, 1802
nature reserves 395, 815, 1232, 1716
navigation dredging 166
NAWQA 1445
Nebraska 138, 852, 1082, 1135
negative attitudes 1270
neglected field study 813
nematicides: pesticide 31
nematoda 1557, 1693
nematode control 1557
nematode (Nematoda) 766
Nephelometers 438
Nesting 1597, 1711
Nesting behavior 1319
Nests 1597
net energy 1416
net primary productivity 954
Netherlands 369, 455, 510, 950, 1046, 1255, 1416
network cohesion 795
Network design 337, 1076, 1607
Neuroendocrinology 651
nEuropeptide hormones 651
neuroptera 976
Neuse River estuary 800
neutralization 585
Nevada 1349, 1429, 1752
Nevada mountain range 327
New England 520
New Jersey 1590
New Mexico 340, 602, 768, 1205, 1566
New South Wales 246, 1298
new zealand 331, 372, 829, 1386, 1484
nicandra steroids: antifeedant, natural product 968
niche partitioning 175
nickel 1296
nitrate 104, 105, 478, 540, 571, 652, 684, 798, 800, 817, 850, 861, 982, 990, 995, 1002, 1065, 1200, 1235, 1269, 1314, 1439, 1482, 1643, 1764
nitrate fertilizers 1301
nitrate: leaching 1027
nitrate: leaching, pollutant 736, 989
nitrate: loading, pollutant, removal, uptake 421
nitrate nitrogen 295, 375, 855, 861, 917, 998, 1301
nitrate: nutrient, pollutant, sap concentrations, shallow underground water table removal 1692
nitrate: pollutant 532, 1746
Nitrates 147, 486, 542, 635, 988, 1049, 1202, 1235, 1314, 1358, 1445, 1720
Nitrates---Environmental aspects---Middle Atlantic States 979
nitric oxide 132, 990, 1400, 1402
nitric oxide: emission, greenhouse gas 456
nitric oxide: natural emissions, pollutant 967
nitric oxides: pollutant, toxin 1636
nitrification 32, 453, 847, 868, 915, 993, 1000, 1002, 1003, 1400, 1720
nitrification inhibitors 897, 997, 1790
nitrite 326, 571
nitrites 1720
nitrogen 26, 34, 48, 68, 82, 104, 105, 160, 195, 204, 218, 226, 279, 339, 383, 389, 414, 417, 418, 420, 425, 440, 453, 467, 483, 486, 493, 534, 540, 543, 547, 549, 582, 605, 676, 677, 684, 720, 726, 756, 817, 843, 847, 850, 860, 863, 867, 870, 915, 917, 953, 965, 982, 990, 991, 993, 994, 995, 997, 998, 1000, 1001, 1005, 1011, 1020, 1029, 1031, 1039, 1060, 1082, 1190, 1191, 1209, 1229, 1234, 1264, 1269, 1298, 1314, 1327, 1400, 1405, 1416, 1417, 1475, 1479, 1482, 1485, 1518, 1522, 1540, 1556, 1563, 1564, 1581, 1595, 1642, 1668, 1686, 1710, 1720, 1743, 1804
nitrogen: atmospheric deposition, cycling, limitation 989
nitrogen: availability dynamics, available supply, mineralization, nutrient 785
nitrogen balance method 1563
nitrogen: budgets, fixation, nutrient, use efficiency 1374
Nitrogen Compounds 1004
nitrogen: consumption, feces, urine 984
nitrogen: consumption, loss, utilization 983
nitrogen content 302, 375, 436, 1002, 1060, 1281, 1327, 1488, 1710
nitrogen: crop use efficiency, leaching, nutrient, pollutant 1692
nitrogen cycle 10, 160, 213, 226, 425, 436, 486, 493, 540, 720, 798, 818, 987, 995, 998, 1000, 1004, 1039, 1060, 1066, 1209, 1563, 1564
nitrogen cycling 421
nitrogen deposition 423
nitrogen dioxide 132
nitrogen: environmental contaminant, nutrient 446
nitrogen: environmental impact, export, nutrient, pollutant, water pollutant 1761
nitrogen fertilization 311
nitrogen: fertilizer 119, 456, 1746
nitrogen fertilizer management 995
nitrogen fertilizers 212, 302, 371, 375, 402, 453, 486, 540, 549, 652, 726, 849, 855, 990, 991, 992, 993, 995, 998, 1002, 1060, 1234, 1269, 1327, 1344, 1345, 1400, 1416, 1460, 1549, 1563, 1804
Nitrogen fertilizers---Environmental aspects 402, 992
nitrogen fixation 10, 156, 157, 425, 591, 652, 850, 894, 1003, 1020
nitrogen fixing bacteria 453, 894
Nitrogen flow in pig production and environmental consequences 985
Nitrogen in agriculture---Management 996
Nitrogen in agriculture---Middle West 1299
nitrogen loss 436
nitrogen management 720
nitrogen: nutrient 328, 952, 954, 1027, 1552
nitrogen oxides: natural emissions, pollutant 967
nitrogen:phosphorus balance: biogeochemical continuum, productivity 954
nitrogen pool 436
nitrogen removal 988
nitrogen supply 720
nitrogen transformation mineralization 915
nitrogenous compounds 1677
Nitrosomonas europaea 897
nitrous oxide 56, 338, 440, 453, 481, 540, 604, 652, 798, 867, 868, 892, 990, 998, 1003, 1004, 1005, 1229, 1359, 1400, 1402
nitrous oxide: emission, greenhouse gas 456, 1006
nitrous oxide: greenhouse gas 614
nitrous oxide: pollutant 119
nitrous oxides: pollutant, toxin 1636

- NLEAP model** 160
- no-tillage** 36, 275, 277, 279, 301, 309, 407, 464, 537, 573, 642, 678, 686, 788, 987, 991, 995, 1007, 1008, 1088, 1200, 1219, 1304, 1366, 1569, 1602, 1627, 1640, 1669, 1671, 1768
- no-tillage corn** 311
- No tillage---United States** 580
- non equilibrium systems** 1723
- non methane volatile organic compounds: natural emissions, pollutant** 967
- Non patents** 697, 1078, 1442
- non point pollution** 1401, 1532
- non point pollution sources** 1013
- non point source water pollution** 1164
- noncontaminated organic matter** 187
- Nonhuman Mammals** 55, 104, 446, 803, 823, 850, 863, 948, 983, 984, 1006, 1052, 1270, 1303, 1475, 1725, 1808
- nonhuman vertebrates** 55, 102, 104, 113, 146, 165, 166, 446, 463, 560, 630, 667, 701, 803, 814, 823, 850, 863, 948, 983, 984, 1006, 1052, 1094, 1197, 1207, 1251, 1270, 1303, 1352, 1475, 1618, 1635, 1639, 1725, 1808
- nonpoint pollution** 413, 923, 1401, 1645
- Nonpoint pollution sources** 29, 344, 413, 923, 1012, 1013, 1017, 1049, 1159, 1581, 1645
- nonpoint source assessment** 1453
- nonpoint source pollution** 1, 43, 80, 81, 107, 136, 295, 364, 421, 958, 1018, 1061, 1158, 1301, 1388, 1439, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1740, 1758, 1764
- Nonpoint source pollution California** 1330
- Nonpoint source pollution---Chesapeake Bay Watershed---Md and Va** 1745
- nonpoint source pollution potential** 499
- Nonpoint source pollution---United States** 1010, 1420, 1582
- Nonpoint source pollution---United States---Computer programs** 1080
- nonpoint sources** 1016
- nontarget effects** 168, 202, 533, 671, 730, 758, 1387
- nontarget organism** 662
- nontarget organisms** 479, 730, 1387, 1809
- Nonvascular Plants** 55, 114, 115, 116, 146, 152, 169, 354, 368, 553, 659, 670, 814, 851, 909, 968, 1110, 1479, 1618, 1619, 1649
- North America** 6, 20, 26, 51, 52, 54, 79, 88, 91, 120, 125, 127, 176, 197, 204, 216, 222, 275, 282, 319, 321, 382, 388, 407, 530, 537, 539, 565, 573, 588, 589, 593, 607, 616, 668, 679, 682, 685, 690, 770, 788, 796, 825, 830, 849, 852, 862, 878, 982, 986, 991, 1038, 1046, 1076, 1077, 1087, 1103, 1192, 1194, 1200, 1219, 1223, 1264, 1312, 1317, 1351, 1394, 1396, 1422, 1427, 1429, 1436, 1520, 1566, 1590, 1616, 1630, 1640, 1671, 1674, 1681, 1682, 1689, 1691, 1700, 1732, 1743, 1752, 1768
- North America America** 96
- North America Carolina** 788
- North America Central States of USA** 88, 319, 788, 852, 1566
- North America Dakota** 1566
- North America, Great Lakes** 1121, 1373, 1630
- North American Research Strategy for Tropospheric Ozone [NARSTO]** 896, 967
- North Carolina** 436, 441, 1062
- north central states of USA** 140, 861, 1793
- North Dakota** 903, 1082
- Northeast** 517
- Northeast North America** 1635
- northeastern states of USA** 999, 1590
- Northern goshawk** 424
- Northern Plains States of USA** 852, 1566
- northern wetlands** 898
- Northwest Australia** 1635
- Norwalk virus** 452
- Norway** 344, 677
- novel ecosystems** 1437
- Noxious weeds---West---United States** 713
- nuisance** 921
- Numerical Analysis** 1128, 1377
- Numerical Methods** 266
- numerical simulation** 1525
- nurse trees** 579
- nurseries** 953, 1405
- Nurseries---Horticulture---Environmental aspects** 871
- Nurseries---Horticulture---Management** 871
- nursery soil management** 1025
- Nursery stock---Irrigation** 871
- nutrient** 605
- nutrient availability** 218, 226, 418, 425, 445, 478, 547, 867, 917, 947, 1020, 1174, 1336, 1365, 1448, 1488, 1511, 1568
- nutrient balance** 440, 1189, 1416, 1485, 1642, 1657
- Nutrient concentrations** 1464, 1581
- nutrient content** 142, 203, 363, 418, 428, 573, 1281, 1345, 1699
- Nutrient cycles** 1030, 1034, 1162, 1724
- nutrient cycling** 278, 552, 630, 801, 1027, 1110, 1352, 1636
- nutrient deficiencies** 846
- nutrient dynamics** 794
- nutrient emissions** 328
- nutrient enrichment** 236, 295, 903, 1030, 1259, 1721
- nutrient excesses** 363
- nutrient excretion** 1475
- nutrient imbalances** 1552
- nutrient inputs** 1347
- Nutrient loading** 339, 685
- nutrient loadings** 521
- nutrient loss** 657, 1412
- nutrient losses** 1027
- nutrient management** 104, 218, 281, 364, 995, 1197, 1269, 1322, 1561, 1740
- nutrient management guidelines** 863
- nutrient management plan** 1234
- nutrient-nutrient interactions** 244, 692, 846
- nutrient: plant tissue levels** 1552
- Nutrient pollution of water---Chesapeake Bay Region---Md and Va** 232
- Nutrient pollution of water---United States** 1042, 1043, 1265, 1320
- nutrient pools: control, regulation** 1352
- nutrient ratios** 605
- nutrient removal** 723
- nutrient requirements** 219, 705, 846, 1002, 1190, 1710, 1737
- nutrient retention** 1340
- nutrient sink** 1556
- nutrient sources** 720, 995, 1033, 1400
- nutrient transformation** 954
- nutrient transport** 521, 1002, 1166
- nutrient uptake** 114, 213, 254, 363, 375, 600, 784, 1002, 1060, 1344, 1376, 1710
- nutrient use efficiency: animal conversion, soil uptake** 328
- nutrients** 13, 46, 49, 82, 91, 108, 146, 164, 202, 203, 204, 205, 213, 222, 302, 390, 451, 500, 507, 544, 602, 630, 676, 677, 701, 714, 736, 864, 876, 881, 917, 950, 1011, 1012, 1029, 1030, 1031, 1034, 1037, 1038, 1044, 1110, 1128, 1162, 1298, 1304, 1324, 1336, 1401, 1409, 1418, 1454, 1464, 1485, 1536, 1572, 1581, 1587, 1668, 1702, 1715, 1718, 1724

Subject Index

- nutrients: erosion leaching, pollutants** 1692
nutrients: input output balance 1374
nutrients: marine derived 1094
nutrients (mineral) 222, 390, 426, 1030, 1034, 1128, 1401, 1581, 1615
nutrients: surface retention 421
Nutrition 38, 414, 676, 860, 1255, 1485, 1540, 1595
nutrition physiology 445, 1564
nutritional disorders 705
nutritional management 1594
nutritional state 1060, 1737
nutritive value 89, 203, 769, 1297, 1741
NWQAP 1388
Nyssa biflora (Nyssaceae) 234
O-glycoside hydrolases 244
objectives 99, 862
Observation methods 1413
ocean 605
Ocean circulation and currents 1670
Ocean dumping 1528
Oceania 222, 627, 856, 1298, 1386, 1456, 1484, 1519
octanol air partition coefficient 134
odocoileus hemionus 1727
Odocoileus spp. (Cervidae): bioindicator, deer 1725
odocoileus virginianus 1727
Odonata (Odonata) 1635
Odonates 1635
odonta 1232
odor 446
odor abatement 16, 353, 647, 1415, 1572, 1626, 1687, 1728
odor control 624, 820, 1062, 1071, 1497
odor control strategies 1052
odor control technology 1062
odor emission 298, 353, 1402, 1626, 1677, 1687
odor emissions 1062, 1071
odor intensity 1677
odor problems 854
odorous compounds 1359
odorous emissions: treatment 2
odors 8, 16, 56, 635, 1024, 1054, 1399, 1677, 1687, 1728
Ohio 138, 852, 903, 1566
Ohio watersheds 710
Oil pollution 435, 934
oil seed rape (Cruciferae): oil crop 473
oil spills 934, 1470
oilseeds 692
Oncorhynchus mykiss 1223
Oncorhynchus spp. (Osteichthyes) 102
Oncorhynchus spp. [Pacific salmon] (Osteichthyes): anadromous 1094
onion: vegetable 1655
Ontario 275, 1076, 1365
open burning 457
open water 522
operation 1572
Optimization 344, 1115, 1575
orange (Rutaceae): fruit crop 254
orb spiders 512
orchards 325, 741, 747, 754, 976, 1457, 1707
Oregon 79, 537, 650, 903, 1349, 1422, 1566
ores 1419
organic 432, 829
organic acids 363, 1677
organic amendments 256, 847, 1557, 1653
organic by product composting 143
organic carbon 3, 7, 20, 108, 695, 927, 942, 988, 1479, 1507, 1519
organic carbon: agricultural management, soil 716
organic compounds 108, 112, 432, 435, 439, 544, 602, 634, 635, 942, 1067, 1078, 1093, 1169, 1294, 1404, 1588, 1735
organic compounds: degradation, pollutant, soil, toxin 670
organic contaminants 1660
organic farming 105, 153, 224, 238, 375, 481, 950, 975, 1009, 1029, 1065, 1200, 1447
organic farms 1374
organic farms: productivity limitations 785
organic fertilizer 552
organic fertilizers 13, 203, 819, 1552, 1642
organic matter 3, 4, 186, 205, 390, 425, 517, 585, 677, 697, 801, 829, 847, 910, 942, 1002, 1254, 1304, 1318, 1324, 1461, 1552, 1634, 1642, 1720, 1732, 1785
organic matter decomposition 851
organic matter: erosion leaching 1692
organic matter turnover 311
organic nitrogen compounds 5, 998
organic pollution 783
organic sediment transfer 806
organic soil amendment 1064
organic sulfur compounds 1677
organic toxicants: binding, degradation, pollutant, toxin 187
organic waste recycling 1364
organic wastes 164, 483, 648, 1367
Organic wastes as fertilizer---United States 268
Organic wastes---Recycling 260
organics 1686
organism (Organisms) 794
organism (Organisms): alien species, benthivorous consumer, carnivore 630
organism (Organisms): bioindicator 1507
organism (Organisms): disinfection resistance, waterborne pathogen 370
organism (Organisms): Red List species, protected species 1348
Organisms 370, 928, 1618
organization of research 455
organizations 170, 1515
organizing paradigms 1068
Organochlorine compounds 1121, 1167
Organochlorine compounds---Environmental aspects---United States 1069, 1142, 1143
organochlorine pesticide: pollutant 93
organochlorine pesticides 634, 1706
organochlorine pesticides: determination, pollutant, extraction 1613
organochlorine: pollutant 1253
organochlorines 1121
organolepsis 1677
organophosphate insecticides: insecticide, pollutant, toxin 133
organophosphate: pollutant 1253
organophosphates 511, 1121
Organophosphorus compounds 4, 335, 1114, 1121
organophosphorus insecticides 1809
organophosphorus pesticides 4, 335, 721, 834
organophosphorus pesticides: determination, pollutant, extraction 1613
organotin compounds 435, 1732
organotin pesticides: determination, extraction, pollutant 1613
orius laevigatus 238
ornamental plants 530, 774, 953
ornamental woody plants 530, 1699
orthoptera 89, 477
Oryza sativa 612, 744, 846, 1060, 1174, 1247, 1336, 1421, 1488, 1790
osmoregulation 1448
osmosis 1490
Osteichthyes (Osteichthyes) 113, 146
Other water systems 139, 452, 1249, 1646
overabundant populations 1808
overbank deposition 1267
overexploitation 449

- overfertilization 1158
- overgrazing 340, 449, 690, 869, 1422
- overland flow 205, 929, 933, 972, 973, 1194, 1276, 1278, 1376
- Overwintering 1597
- oviposition choice 755
- ovis canadensis 1727
- oxalate 581
- oxalic acid buffered solution 581
- oxidants 1448
- oxidation 439, 899, 900, 1115, 1125, 1368, 1419, 1790
- Oxidative stress 1469
- oxidized nitrogen: atmospheric budget 132
- Oxisol 55
- oxygen 674, 867, 941, 1511
- Oxygen demand 108
- Oxygen depletion 1581
- Oxygen Transfer 1398
- Ozonation 1115, 1575
- ozone 45, 49, 493, 551, 999
- ozone depletor 45
- ozone: deposition, formation 132
- ozone hole 45
- Pacific Northwest States of USA 79, 174, 537, 849, 1396, 1422, 1566
- Pacific States of USA 79, 537, 539, 849, 1396, 1422, 1566, 1682, 1811
- Packaging 501
- paddy fields 897
- paddy soils 1790
- Palaeolimnology 696
- Paleoecology 696, 1172
- Paleolimnology 108, 696
- paper mill sludge 142
- paper summaries 1787
- Papilionoidea 6, 275, 319, 852, 855, 1200, 1264, 1640, 1726
- paradigm shifts 1723
- paradox of brackish water 122
- parameters 1532
- parametric hydrology 1495
- paraquat 662
- paraquat: adsorption, biodegradation, deactivation, herbicide, long term environmental fate 332
- parasites 321, 322, 697, 969, 1098, 1102, 1617
- parasites of insect pests 747, 1387
- parasitic diseases 322
- parasitism 755, 766, 894
- parasitoid production 1463
- parasitoids 730, 1387
- parathion 1658
- particle 457
- particle composition 122
- particle partitioning 134
- particle phase 134, 1658
- particles 1811
- particulate matter 1116
- Particulate organic matter 942
- partitioning behavior 480
- partners (people) 1259
- Passeriformes 1319
- passive-vs-active control methods 839
- pasture 470, 829
- pasture fertility 803
- pasture plants 6, 89
- pastures 6, 409, 769, 1386, 1486, 1587, 1666
- patch shape 801
- patch size 801
- path length 1315
- path of pollutants 3, 108, 542, 934, 1004, 1012, 1093, 1116, 1117, 1124, 1150, 1585
- pathogen 691
- pathogen populations 590
- pathogen reduction 143
- Pathogenic bacteria 351
- Pathogenic microorganisms--- Environmental aspects--- United States 1261
- Pathogenic organism 1249, 1412, 1442
- pathogens 90, 139, 149, 192, 322, 347, 349, 350, 351, 452, 483, 541, 544, 636, 697, 714, 873, 947, 1038, 1073, 1102, 1103, 1104, 1173, 1195, 1249, 1259, 1402, 1412, 1442, 1617, 1646, 1743, 1757
- Pathology 1512
- PCB 112, 1373
- PCB compounds 112, 1373
- PCBs [polychlorinated biphenyls]: pollutant, toxin 134
- peanuts 786
- peat 900, 1346, 1702
- pelagic habitats 630
- Pennsylvania 577, 903, 1665, 1719
- Perching birds 1319
- percolation 1247
- Peregrine falcon 424
- perennials 14, 970, 1171, 1276, 1768
- performance 203, 462, 782, 1380, 1529, 1572, 1666
- Performance Evaluation 1159, 1271, 1695
- performance liquid chromatography 1152
- performance testing 1185
- periphytic assemblages 368
- periphyton (Organisms): abundance, growth, productivity 1110
- permanent grasslands 1194
- permeability 20, 443, 677, 867, 1247
- permeability coefficient 1116
- permeable reactive barrier 1662
- persistence 9, 394, 545, 587, 634, 640, 947, 1195, 1523, 1677, 1706, 1716
- persistent organic pollutants [POPs]: pollutant, toxin 134
- pest 397, 595, 1619
- pest assessment control and management 31, 90, 240, 669, 675, 1123
- Pest control 12, 60, 89, 223, 238, 302, 327, 387, 422, 431, 458, 474, 477, 506, 700, 738, 742, 750, 754, 761, 853, 949, 1075, 1193, 1245, 1494, 1532, 1576, 1629, 1644, 1659, 1671, 1735
- pest control method 1463
- pest management 60, 89, 124, 231, 250, 309, 393, 397, 479, 563, 595, 730, 731, 762, 786, 839, 970, 1112, 1326, 1463, 1576, 1619, 1717
- pest movement 691
- pest potential 197
- pest resistance 265, 479, 612, 730, 744, 776, 1512, 1659
- Pest species 766
- pesticide 45, 189, 327, 473, 560, 1540
- pesticide: analysis 1601
- pesticide application 281, 458
- Pesticide applications 1343
- pesticide biological substitutes 172
- pesticide chemical oxidation processes 1114
- pesticide classes 200
- pesticide contamination 133
- pesticide degradation 1556
- pesticide deposition 135
- pesticide disposal: state programs 1679
- pesticide: environmental contamination, misuse, pesticide, use 1070
- pesticide environmental impact 366
- Pesticide environmental pollution 1150
- pesticide fate 1532
- pesticide: leaching, soil sorption parameters 1126
- pesticide metabolites: analysis, detection 211
- pesticide: pesticide 1127
- pesticide poisoning 662
- pesticide: pollutant 93
- pesticide productivity 786
- pesticide registration 100, 1127
- Pesticide regulations 546
- pesticide residues 9, 35, 38, 46, 47, 77, 138, 200, 202, 331, 454, 587, 671, 932, 1118, 1119, 1120, 1132, 1136, 1141, 1248, 1291, 1324, 1379, 1555, 1578, 1593, 1715
- pesticide residues: analysis, extraction, food contaminant 1614

Subject Index

- pesticide resistance 741, 745, 1342
pesticide: toxicity, usage 1130
pesticide transformation 1658
pesticide transformation product 1655
pesticide transport 1532
pesticide use 116, 851
pesticide: water pollutant 1655
pesticides 3, 4, 9, 20, 33, 45, 47, 48, 75, 91, 105, 113, 123, 124, 151, 162, 164, 168, 172, 183, 185, 186, 202, 223, 224, 230, 238, 247, 295, 325, 335, 337, 377, 390, 394, 397, 411, 432, 433, 434, 435, 442, 448, 454, 458, 481, 494, 511, 533, 542, 563, 587, 593, 618, 649, 657, 662, 666, 668, 671, 675, 683, 704, 721, 728, 736, 744, 758, 759, 786, 789, 899, 925, 932, 948, 961, 1012, 1057, 1065, 1067, 1090, 1091, 1113, 1115, 1116, 1117, 1118, 1119, 1121, 1122, 1124, 1125, 1128, 1131, 1132, 1133, 1134, 1135, 1136, 1145, 1147, 1150, 1167, 1169, 1199, 1245, 1289, 1291, 1339, 1343, 1373, 1375, 1379, 1387, 1395, 1403, 1412, 1457, 1473, 1474, 1523, 1532, 1578, 1585, 1593, 1627, 1650, 1681, 1718, 1790, 1813
pesticides: agrichemical 1679
pesticides: agrichemical, environmental pollutant, extraction, pesticide, quantitative analysis, river water level, separation, toxin 1455
pesticides: analysis 570, 1292
pesticides: analysis, detection 832
pesticides: analysis, detection, uses 211
Pesticides Application---United States 1256
pesticides: aquatic toxicity 646
pesticides: atmospheric fate, deposition, toxin, pesticide, pollutant 135
pesticides: biotransformations, degradation 336
Pesticides (carbamates) 511
pesticides: degradation, fate 1048
Pesticides degradation---United States 489
pesticides: determination, pollutant, extraction 1613
Pesticides---Economic aspects---United States 699
Pesticides---Environmental aspects 858, 1137
Pesticides---Environmental aspects---Measurement 27
Pesticides---Environmental aspects---Middle Atlantic States 979, 1146
Pesticides---Environmental aspects---North Dakota 1260
Pesticides---Environmental aspects---Research---United States 1562
Pesticides---Environmental aspects---South Atlantic States 1146
Pesticides---Environmental aspects---United States 129, 373, 561, 905, 1138, 1139, 1140, 1142, 1143, 1144, 1148, 1149, 1256, 1265, 1611
Pesticides---Environmental aspects---United States---Congresses 1151
Pesticides---Environmental aspects---United States---Measurement 489, 1256
Pesticides---Environmental aspects---West Virginia 1146
Pesticides---Government policy---United States 251, 546, 1611
Pesticides Health aspects 251
Pesticides in surface waters 1150
Pesticides---Law and legislation---United States 1611
pesticides (organochlorine) 1373
Pesticides (Organonitrogen) 4, 75
Pesticides (Organophosphorus) 4, 335, 511
pesticides: pesticide, pollutant, toxin, transport 1129
pesticides: physico chemical characteristics, pollutant 1051
pesticides: physico chemical characteristics, volatilization 886
pesticides: pollutant 187, 951
pesticides: pollutant, toxin 100, 916
Pesticides---Risk assessment---United States 489
Pesticides Risk mitigation---North Dakota 1260
Pesticides Safety measures 251
Pesticides Toxicology 251, 1137
Pesticides---Toxicology---United States 1256
pesticides: toxin 1406
Pesticides---United States 28, 596, 698
Pesticides---United States---Congresses 1151
pests 197, 458
Pests---Control 698
Pests Control---United States---Handbooks, manuals, etc 775
Pests---Integrated control---Congresses 1309
Pests Integrated control Periodicals 748
Pests Integrated control Research Periodicals 748
Pests---Integrated control---United States 28, 737, 959
petroleum 970, 1169, 1324
petroleum hydrocarbons 934, 1169
petroleum pollution 764
pH 100, 847, 899, 947, 1302, 1368, 1479, 1591
pH effect 661
pH effects 186, 1418
phages 139
Phalaris arundinacea 770
Phanerochaete chrysosporium 1362
Phasianidae 204, 1208, 1399, 1706, 1741
Phasianus colchicus 1221
phenology 212, 776, 1172, 1540, 1698
phenols 1677
phenotypes 1458
phenoxyacetic acid pesticides: determination, extraction, pollutant 1613
phenoxyacids 1114
pheromone 1075
pheromone olfaction 727
pheromone olfaction inhibitors: insecticide 727
pheromones: analogs, degradation, recognition, transport 727
philosophy 665
phorate 1658
phosphate 605, 719, 1153, 1258, 1642, 1643
phosphate: fertilizer, fixation, nutrient 55
phosphate release 1468
phosphates 263, 1163, 1464, 1643
phosphine 1658
phosphogypsum 1154
phosphoric acid 719
phosphorus 29, 30, 34, 82, 104, 105, 195, 204, 213, 219, 226, 263, 363, 364, 418, 445, 467, 483, 486, 499, 502, 547, 589, 676, 684, 692, 726, 756, 800, 829, 843, 846, 863, 870, 917, 929, 965, 1011, 1029, 1031, 1064, 1084, 1153, 1156, 1157, 1160, 1162, 1163, 1190, 1194, 1209, 1241, 1255, 1258, 1268, 1281, 1287, 1298, 1302, 1340, 1376, 1386, 1388, 1405, 1416, 1439, 1464, 1485, 1488, 1518, 1556, 1561, 1581, 1595, 1642, 1657, 1668, 1686, 1719, 1720, 1743, 1758
phosphorus: availability, fertilizer, nutrient, pollution potential 1560

- phosphorus: budgets, nutrient** 1374
phosphorus: consumption, urine, feces 984
phosphorus: consumption, utilization, loss 983
phosphorus cycle 263
phosphorus detergents 1388
Phosphorus---Environmental aspects---Chesapeake Bay Watershed---Md and Va 39
Phosphorus---Environmental aspects---New York NY 1763
phosphorus: environmental contaminant, nutrient 446
phosphorus: environmental impact, export, nutrient, pollutant, water pollutant 1761
phosphorus: export, leaching, loss 1158
phosphorus: fertilizer 1746
phosphorus fertilizers 445, 486, 589, 726, 929, 1156, 1157, 1211, 1345, 1376, 1386
Phosphorus in agriculture---Chesapeake Bay Watershed---Md and Va 39
phosphorus: nutrient 115, 328, 954
phosphorus: pollutant 532, 1212
Phosphorus Removal 1159, 1695
phosphorus sorption capacity 1561
photochemical reactivity 570
Photochemistry 4
photochemistry: applications 832
Photodegradation 4
photodegradation pathway 570
Photolysis 1115
photosynthesis 1033, 1172, 1225, 1369, 1418, 1650
Phototrophy 1418
Phragmites australis 770, 1785
Phragmites australis (Gramineae) 128
phthalate esters 480
Phycomycetes (Phycomycetes) 116
physical characteristics 806
physical chemical methods 31
physical control 686, 749, 830, 839, 1511
physical interactions 814
physical modification 1352
physical processes 630, 809
physical properties 184, 311, 558, 1165, 1318, 1482, 1559
physical reactions 1658
physicochemical conditions 1476
physicochemical indicators 1201
physicochemical properties 47, 135, 192, 480, 1124, 1154, 1634, 1699
physicochemical properties 134
physiological change 240
Physiological tolerance 1635
Physiology 162, 1285
Physiology, biochemistry, biophysics 130, 186, 900, 1418
phytase 244, 418, 547, 1044, 1246
phytase: feed supplement 446
phytic acid 418, 692
phytopathology 45
phytoplankton 170, 605, 1201, 1418
phytoplankton (Algae) 1110
phytoplankton biomass 1468
phytoremediation 64, 1167, 1168, 1735
phytotechnologies 1352
phytotoxicity 231, 256, 309, 789, 1172, 1517
phytotoxins 231, 309
picloram 177, 542, 640
picoxystrobin: environmental safety, fungicide, mode of action, risk, strobilurin, synthesis 1603
pie billed grebe (Podicipediformes) 667
pig manure 68, 74, 262, 298, 447, 467, 547, 647, 985, 1062, 1103, 1163, 1626, 1728, 1731
pig production 983, 984
pig (Suidae) 983, 984
pig (Suidae): commercial species, finishing, livestock, piglet 446
piglets 1163, 1737
pigs 1737
pilot projects 1164
pine 423
pine (Coniferopsida) 429
pine plantations 641
pinus 436, 573
Pinus palustris [longleaf pine] (Coniferopsida) 641
Pinus ponderosa 424, 1708
Pinus radiata 225
Pinus sylvestris 423
Pinus taeda 573
pioneer species 1698
Pisces 432, 565, 1101, 1403, 1676
Pisces (Pisces Unspecified) 165, 463
Pistia stratiotes 1073
Pisum sativum 1264
pka values 545
placement 579, 995, 997, 1002
plain riparian system 327
plains 407
planktivorous fish 1468
Plankton 1128
plankton (Organisms) 630
plankton (Organisms): production 1618
plankton (Organisms Unspecified) 146
planning 25, 92, 120, 492, 816, 1435, 1492, 1748
plant analysis 356
plant breeding 310, 361, 363, 730, 1175, 1336, 1591
plant communities 117, 125, 140, 221, 340, 645, 1169, 1172, 1267, 1331, 1349, 1378, 1427, 1637, 1690, 1708, 1789, 1802
plant competition 398, 579, 749, 1045, 1361, 1666
plant composition 363, 953, 1225, 1517
Plant control 1575, 1735
plant cover 1352
plant density 212, 391, 522, 849, 888, 1771
plant development 309, 1444
plant disease control 12, 302, 448, 615, 678, 847, 1058, 1173, 1308, 1671, 1717
plant diseases 12, 49, 279, 333, 653, 705, 830, 1058, 1173, 1308, 1389, 1465, 1576, 1671
plant ecology 117, 309, 388, 588, 665, 1232, 1427, 1436, 1458, 1802
plant growth 1536
plant growth regulators 621, 1488
plant height 484, 522, 937, 1344, 1604, 1666
Plant indicators---United States 1713, 1779
plant introduction 197
plant materials 1573
Plant metabolism 1418
plant morphology 363, 645, 1172, 1698
plant nematode interactions 31
plant nutrients 1254
Plant nutrients---Environmental aspects---California 1330
plant nutrition 600, 750, 849, 950, 953, 1264, 1326, 1344
Plant parasites---Control 495
plant parasitic nematodes 975, 1173, 1557
Plant pathogen 766
plant pathogenic fungi 163, 784, 1173
plant pathogens 163, 173, 256, 678, 847, 970, 1173, 1308, 1321, 1389
plant pathology 282, 589, 830, 1058, 1173, 1389, 1465
plant pests 12, 49, 279, 325, 653, 700, 705, 1576, 1671
plant physiology 11, 758, 811, 870, 1166, 1488, 1517
plant (Plantae) 410, 553, 665, 1253, 1437, 1536, 1540, 1672
plant (Plantae): bioindicator 1725
plant (Plantae): crop 886, 1177
plant (Plantae): crop, weed 1130
plant (Plantae): pest 755
plant (Plantae): rooted aquatic vascular 1095

Subject Index

- plant (Plantae Unspecified)** 257, 502, 552, 576, 724, 783, 1153, 1439, 1619, 1714
- Plant populations** 770, 1510
- plant productivity** 764, 1540
- plant protection** 12, 223, 479, 615, 830, 839, 1199, 1304, 1671
- plant protection products** 915
- plant proteins** 941
- plant residues** 213, 677, 911, 1064, 1339
- Plant Sciences** 311
- plant succession** 340, 384, 398, 484, 971, 1045, 1169, 1172, 1176, 1232, 1317, 1427, 1521, 1698
- plant tissues** 1613
- plant toxic proteins: insecticide** 1177
- plant viruses** 691, 1173
- plant water relations** 600, 811, 849, 937, 1264, 1266, 1288, 1378, 1591, 1752
- plant water uptake** 1483
- Plantae** 1413, 1418
- Plantae (Plantae Unspecified)** 552, 576, 724, 731, 764, 766, 783, 789, 931, 948, 1176, 1439, 1619, 1781
- Plantations** 530, 1282
- planting** 579, 1671
- planting date** 1247, 1812
- Planting Management** 1735
- planting stock** 12, 953
- plants** 6, 10, 53, 55, 114, 115, 116, 128, 132, 146, 152, 160, 169, 176, 177, 179, 182, 234, 235, 253, 254, 257, 275, 282, 319, 334, 354, 363, 368, 407, 410, 429, 452, 463, 473, 502, 523, 530, 537, 552, 553, 573, 576, 587, 589, 613, 627, 641, 643, 645, 652, 659, 665, 667, 669, 670, 677, 694, 700, 701, 716, 724, 731, 755, 764, 766, 783, 785, 788, 789, 814, 823, 849, 850, 851, 852, 855, 869, 886, 908, 909, 931, 948, 952, 968, 1025, 1058, 1077, 1089, 1095, 1110, 1125, 1130, 1153, 1166, 1167, 1168, 1172, 1176, 1177, 1192, 1200, 1219, 1251, 1253, 1264, 1298, 1312, 1321, 1347, 1361, 1367, 1389, 1414, 1427, 1437, 1439, 1447, 1479, 1482, 1483, 1496, 1512, 1536, 1540, 1564, 1591, 1602, 1604, 1618, 1619, 1640, 1649, 1652, 1672, 1673, 1690, 1692, 1714, 1725, 1752, 1768, 1781, 1785
- Plants general** 1510
- plants (Plantae)** 132, 334, 814
- plants (Plantae Unspecified)** 1176
- Plants, Potted---Irrigation** 871
- Plastics Products** 501
- playa wetlands** 1100
- plowing** 153, 212, 1008, 1230, 1231, 1304, 1602, 1640, 1642, 1671
- plows** 885, 1008
- Plutella xylostella [diamondback moth] (Lepidoptera): agricultural pest** 729
- pogonomyrmex** 89
- Point source identification** 1010
- point source pollution** 1759
- point sources** 107, 1016
- polar organic molecules** 1618
- Policies** 816, 1034
- policy** 1014, 1016
- Policy and planning** 1443
- policy assessment** 53
- policy options** 853
- pollen** 309
- pollination** 377
- pollinators** 730
- pollutant** 45
- pollutant bioavailability** 670
- pollutant biotransformation** 670
- pollutant deposition** 1580
- Pollutant Identification** 137, 167, 347, 349, 351, 372, 833, 1133
- pollutant input** 532
- pollutant load** 657
- pollutant persistence** 110, 331, 335, 833, 1395, 1445
- pollutant reduction** 446
- Pollutant removal** 287, 532, 1167
- pollutant transport** 736
- pollutants** 17, 42, 109, 112, 137, 168, 202, 208, 326, 412, 432, 439, 484, 551, 602, 618, 666, 681, 831, 928, 1014, 1016, 1018, 1067, 1084, 1090, 1123, 1181, 1187, 1198, 1201, 1296, 1305, 1371, 1471, 1522, 1579, 1651, 1658, 1693, 1706, 1732, 1791
- Polluted environments** 167
- polluted soils** 326, 439, 454, 627, 645, 932, 1046, 1168, 1291, 1324, 1457, 1517, 1522, 1578, 1653, 1690
- polluted water** 47, 326, 831, 947, 977, 1005, 1046, 1104, 1291, 1305, 1700, 1732, 1785
- pollution** 45, 48, 68, 107, 113, 130, 147, 164, 181, 189, 198, 202, 206, 219, 228, 340, 467, 480, 481, 497, 547, 587, 616, 619, 640, 662, 676, 756, 787, 843, 928, 948, 953, 982, 1003, 1014, 1016, 1037, 1044, 1056, 1072, 1131, 1154, 1190, 1191, 1202, 1237, 1305, 1339, 1364, 1381, 1405, 1424, 1454, 1549, 1593, 1595, 1668, 1675, 1693, 1718, 1741, 1743
- pollution abatement** 1758
- Pollution (Air)** 1004, 1581
- Pollution Assessment Control and Management** 1123, 1364
- pollution control** 8, 40, 42, 56, 83, 119, 139, 188, 222, 228, 292, 329, 348, 378, 493, 673, 676, 726, 827, 831, 861, 865, 874, 923, 999, 1005, 1013, 1014, 1018, 1031, 1037, 1076, 1160, 1164, 1167, 1168, 1181, 1211, 1234, 1246, 1269, 1300, 1301, 1324, 1358, 1362, 1379, 1381, 1391, 1419, 1435, 1453, 1497, 1500, 1503, 1513, 1516, 1561, 1578, 1581, 1592, 1630, 1645, 1684, 1700, 1715, 1729, 1759, 1790
- Pollution Control and Prevention** 222
- Pollution control (Environmental)** 964
- Pollution detection** 75, 347, 349, 372, 666
- pollution dispersion** 494, 544, 924, 928, 934, 1124, 1147, 1379, 1395, 1580
- Pollution effects** 110, 167, 222, 247, 339, 390, 433, 442, 493, 494, 511, 649, 683, 721, 1057, 1090, 1128, 1150, 1343, 1373, 1401, 1403, 1462, 1469, 1581, 1638, 1648, 1650, 1782
- Pollution Environment** 339, 412, 494, 1401, 1581
- Pollution (Groundwater)** 1235, 1314
- pollution indicators** 139, 347, 349, 511, 1469, 1516
- Pollution legislation** 222, 923
- pollution load** 1301, 1314, 1388
- Pollution (Microbiological)** 1249
- pollution monitoring** 34, 148, 162, 222, 349, 1013, 1034, 1076, 1093, 1379, 1516, 1645
- Pollution monitoring and detection** 1516
- Pollution (Nonpoint sources)** 344, 1159, 1581
- Pollution Organisms** 130, 1469
- pollution prevention** 1164
- Pollution (Soil)** 3, 4
- Pollution sources** 1581
- Pollution studies general** 1581
- Pollution surveys** 833, 1147
- Pollution tolerance** 167, 1648
- Pollution---United States--- Measurement** 1605
- Pollution (Water)** 3, 4, 1249, 1412, 1469, 1581
- polyacrylamide** 1031, 1182, 1183
- polybrominated biphenyl: pollutant** 93
- polybrominated diphenylether: pollutant** 93
- polychlorinated biphenyls** 112, 230, 435, 789, 1373
- polychlorinated biphenyls [PCBs]: pollutant** 187

- polychlorinated biphenyls:
 - pollutant 93
- polychlorinated dibenzo p dioxin:
 - pollutant 93
- polycyclic aromatic hydrocarbons 442, 457, 1362
- polycyclic aromatic hydrocarbons [PAHs]: pollutant 187
- polycyclic aromatic hydrocarbons: pollutant 93
- polymerase chain reaction 1118
- polynuclear aromatic hydrocarbons 789
- pond 396
- Pond culture 1184
- Pond cypress 234
- Ponderosa Pine 424
- ponds 865, 973, 1031, 1185, 1343, 1448, 1513
- poplars 1427
- population decline 367, 442, 1638
- population density 422, 516, 724, 1543
- population deterioration 701
- Population dynamics 14, 221, 265, 365, 391, 397, 422, 438, 442, 595, 630, 693, 750, 766, 830, 862, 1057, 1221, 1233, 1343, 1458, 1510, 1516, 1752
- Population ecology 12, 175, 693, 804
- population growth 14, 475, 612, 773, 1307
- Population number 566, 1462
- population stability 560
- population structure 173, 1516
- population variability 512
- population viability analysis 512
- populations 210, 325, 520, 668, 795, 1088, 1716
- Populations & general ecology 689, 1726
- Populus 1202, 1427, 1752
- populus fremontii 584
- pore water: contamination 1186
- pore water [interstitial water] 1476
- pore water pressure 659
- porosity 47, 275, 301, 677, 1165, 1266, 1385, 1519, 1643
- Porous Media 617, 1660
- Portugal 369
- positive attitudes 1270
- Positive Sense Single Stranded RNA Viruses 370
- post exclusion dynamics 1431
- post volatilization flux 916
- postharvest quarantine treatments 704
- pot experimentation 588
- potable water taint 909
- potassium 195, 846, 1029, 1281, 1416, 1642
- potassium: budgets, nutrient 1374
- potassium fertilizers 1345, 1642
- potatoes 677, 1344
- potential mate discrimination 701
- Potted plant industry---
 - Environmental aspects 871
- poultry 198, 204, 714, 835, 843, 1044, 1190, 1206, 1208, 1237, 1399, 1415, 1706, 1741
- poultry (Aves) 1475
- poultry droppings 204, 835, 1204, 1209, 1399
- poultry industry 30
- Poultry industry---Waste disposal---
 - Handbooks, manuals, etc 1210
- poultry litter 829, 1197
- poultry manure 13, 30, 147, 203, 244, 338, 418, 673, 692, 835, 847, 1024, 1046, 1190, 1208, 1209, 1237, 1293, 1297, 1302, 1415, 1741
- poultry manure: environmental contaminant 446
- Poultry Manure Handling---United States 268
- Prairie ecology---Great Plains---
 - Handbooks, manuals, etc 836
- Prairie ecology---United States 161
- prairie soils 1793
- prairies 690, 830, 1218, 1793
- pre treatment data: collection 1431
- precipitation 49, 295, 320, 523, 525, 526, 997, 1066, 1219, 1264, 1301, 1392
- Precipitation (Atmospheric) 1271
- precipitation measurements 1307
- Precipitation---Meteorology---
 - United States 269
- precision farming 311, 1531
- Precision farming---Environmental aspects 1220
- Precision farming---Research 1220
- predation 148, 701, 755, 895, 976, 1094, 1098, 1221, 1494, 1587, 1635, 1711
- predator prey interactions 354, 630, 1473
- predator prey relationships 118, 1708
- predator production 1463
- predators 730, 1587, 1727
- predators of insect pests 212, 741, 747, 976
- predatory mites 747
- prediction 12, 91, 224, 341, 475, 478, 510, 523, 1226, 1271, 1294, 1308, 1314, 1369, 1774, 1775
- preferential flow 47, 276, 558, 1194, 1643, 1660
- Preparation of reviews 108, 635
- prescribed burning 395, 408, 425, 436, 453, 478, 650, 1045, 1085, 1228, 1317, 1349, 1459, 1698
- prevalence 1072
- Prevention and control 139, 222, 378, 923, 1013, 1034, 1419
- prices 106
- Primary production 1418, 1464
- primary productivity 1110, 1418, 1464
- primates 321, 376, 468, 504, 764, 783, 789, 914, 948, 969, 1097, 1103, 1109, 1123, 1270, 1487, 1736, 1772, 1808
- prioritization 1672
- private forestry 1667
- private lands 65
- PRMS model 1764
- probiotics 1044, 1448
- product development 448, 451, 1091
- product function 1364
- product use 1364
- production 68, 73, 869, 953, 985, 1154, 1245, 1741
- production costs 244, 407, 1302
- production levels 1197
- production possibilities 52, 127, 841
- productivity 6, 49, 91, 102, 118, 210, 214, 266, 275, 507, 560, 786, 810, 829, 1163, 1366, 1515, 1541, 1587, 1624, 1753
- profit 264
- profitability 407, 744, 1174, 1460, 1496, 1667, 1689
- proglacial 498
- program evaluation 80, 81, 514, 1259
- program planning 514, 1259
- project 345
- projections 1800
- prometon: volatilization 886
- promoters 941
- propachlor: biodegradation, herbicide 152
- prosopis 1427, 1433
- protected species 207
- protection 127, 205, 414, 938, 1684
- Protective measures and control 186, 227, 696, 1030, 1346, 1435, 1600, 1630, 1645, 1676
- protein: dietary 1475
- protein digestibility 692
- protein intake 68
- protein: reduced feed content 446
- proteinase inhibitors 479
- proteinases 244, 418, 1293
- Protozoa 321, 347, 351, 452, 541, 910, 969, 1097, 1103, 1650
- Protozoa: human 452
- protozoa (Protozoa) 814, 1303
- protozoa (Protozoa): pollution indicator 350
- protozoa (Protozoa Unspecified) 348, 851
- protozoal elimination 1303
- Protozoans 348, 350, 370, 814, 851, 1107, 1303

Subject Index

- protozoans (Protozoa): pathogen** 1107
provenance 163
PRZM Model 542
Pseudomonadaceae 90
Pseudomonas spp.
 (Pseudomonadaceae) 90
psychrophilic temperature 180
public agencies 961
public economics 43
public finance 80, 81, 577
Public health 38, 83, 86, 139, 321, 322, 335, 349, 351, 473, 487, 635, 636, 697, 734, 833, 873, 921, 1102, 1103, 1119, 1121, 1147, 1195, 1249, 1442, 1617, 1646, 1732
public lands 807
public water supply 807
public works 1263
Puerto Rico 562
Pulp and paper industry waste waters (Sulphate) 1403
Pulp Wastes 1403
Pulping 1403
purchased manure 1374
Purification 1180, 1646
purification efficiency:
 environmental sample dependent 531
purification method 1593
pyraclostrobin: environmental safety, fungicide, mode of action, risk, strobilurin, synthesis 1603
pyrethrins: insecticide, natural product 968
Pyrethroids 4
pyrite 1419
pyrophosphatases 1490
qualitative analysis 1281, 1789
quality 89, 94, 620, 792, 829, 867, 945, 1553, 1565, 1571, 1729, 1741
quality assurance 1601
quality controls 969, 1515, 1612
quality standards 961
quantification difficulty 1107
quantitative analysis 798, 1281, 1533, 1789
quantitative data 641
quantitative structure activity relationships 1179
quantitative techniques 1268, 1515
quaternary ammonium herbicides 1573
Quebec 1561
quercus 1045
racemization 986
Radiata pine 225
Radioisotopes 108
radionuclides 602, 1688, 1697
rain 15, 92, 465, 587, 611, 715, 933, 941, 1066, 1172, 1264, 1491, 1542, 1719
Rain and rainfall---United States---States 760
Rainbow trout 1223
rainfall 1129
Rainfall erosion 1271
Rainfall Intensity 902, 1271
rainfall simulators 715, 1392
rainwater 764, 1051
ranching 1270
range condition 690, 1276, 1723
Range ecology 1273, 1274, 1277
Range ecology---British Columbia 1275
Range ecology---United States 765, 1272, 1277
Range ecology---United States---States 760
range land 931
range management 388, 485, 607, 650, 690, 769, 807, 1274, 1276, 1277, 1429, 1521
Range management---British Columbia 1275
Range management---New Mexico 237
Range management---New Mexico--Planning 1498
Range management---Research---Arizona 1333
Range management---Research---New Mexico 1333
Range management---Saskatchewan 866
Range management---Southwest 237
Range management---United States 610, 765, 960, 1272, 1277, 1279
Range management---West---United States 178, 713
Range plants---Control---West---United States 178
Range plants---United States 1272
Range plants---West---United States 713
rangeland ecology 1723
rangeland soils 715
rangeland types 665
rangelands 43, 89, 94, 125, 177, 340, 388, 449, 607, 690, 769, 807, 1028, 1273, 1277, 1424, 1429, 1520, 1612, 1678, 1743
Rangelands---New Mexico---Water supply 237
Rangelands---Southwest---Water supply 237
Rangelands---United States 765, 1272, 1277, 1279
Rangelands---Weed control---West---United States 178
Rangelands---West---United States 713, 1280
rapid methods 1201, 1276
Rare fishes---Columbia River---Watershed 1489
Rare species 424, 1332
rate parameter 1369
rates 1369
ratios 1416
reaction rates 1658
Receiving Waters 1464
Recharge 1235, 1378
Recharge Lake 1135
Reclaimed land 10
reclaimed water 1750
reclamation 6, 63, 176, 273, 319, 696, 710, 841, 919, 1154, 1216, 1306, 1346, 1349, 1435, 1436, 1488, 1630, 1676, 1748, 1750, 1789
Reclamation of land 631
recombinant DNA 197
recovery 573, 1468
recreation 638, 1656
recreational water 350
recruitment 757, 1221
Recurvirostra americana 1469
Recycling 6, 32, 85, 451, 501, 697, 1037, 1038, 1102, 1258, 1528, 1730
redox 1468
redox potential 100
redox reactions 1652
reduced water levels 246
reduction 439, 600, 676, 1125
reed bed systems 1696
reed beds 1398
reed progression 128
reed stands: aquatic, terrestrial 128
reference compounds 915
reference wetlands 520
reflectance 6, 1326, 1327, 1413, 1492
Reforestation 225, 1306, 1665
refuse 509
Refuse and refuse disposal---Biodegradation 1214
Regional Analysis 1445
regional emissions 454
regional planning 650, 816, 1215, 1443
regional scale 134
regional variation 1625
regression analysis 79, 246, 1226, 1314
Regulated Rivers 1437, 1638, 1676
regulation 825, 961, 1310
regulations 638, 673, 786, 918, 919, 920, 921, 955, 1100, 1442, 1513, 1579, 1629, 1732
rehabilitation 176, 918, 1243, 1312, 1331, 1351, 1435, 1477
relationships 300, 301, 1545, 1561
relative humidity 92, 443, 735
relaxed eddy accumulation 916
release 720
release mechanisms 1468
relict habitats 1437
remediation 619, 620, 789, 918, 921, 1117, 1170, 1323, 1700
Remote geosensing 1413
remote lakes 133

- remote sensing** 782, 1227, 1234, 1326, 1327, 1328, 1331, 1363, 1413, 1491, 1492, 1493, 1691
- Remote sensing of water resources** 1413
- removal** 521, 1192
- renewable resources** 1394
- Renovate 3** 1397
- reporting guidance** 209
- reproduction** 701, 1373
- reproductive success** 560
- reptiles** 1228, 1597, 1706, 1727
- Reptilia** 1101, 1597
- requirements** 549, 693, 1255, 1367
- research** 19, 26, 41, 61, 95, 170, 222, 303, 318, 329, 509, 526, 558, 563, 589, 743, 811, 813, 835, 852, 864, 882, 894, 950, 1089, 1160, 1199, 1304, 1331, 1332, 1378, 1546, 1547, 1548, 1612, 1681, 1697, 1711, 1770, 1811
- research need** 1525
- research needs** 1495
- research needs assessment** 1808
- research objectives** 794
- research priorities** 942, 964, 1004, 1073, 1150, 1239, 1249, 1334, 1358, 1597, 1609, 1645, 1734
- Research programs** 273, 575, 804, 1073, 1403
- research projects** 455, 1756, 1773
- research support** 81, 1756
- reserves** 795
- reservoir limnology: suspended clay impacts** 1618
- reservoir management** 854
- reservoir operation** 528, 1337
- Reservoir sedimentation** 1023
- reservoir shorelines** 1437
- reservoirs** 654, 807, 1226, 1337, 1446
- reservoirs (water)** 1337
- Residence time** 1162
- residual activity** 908
- residual effects** 394
- residue analysis** 1289
- residue management** 311
- residues** 318, 671, 677, 1131, 1304
- resistance** 322, 612, 1304, 1442
- resistance management** 1341
- resistance mechanisms** 1341
- resource competition** 1110
- resource conservation** 88, 650, 816, 1196, 1443, 1566
- resource evaluation** 38, 342
- resource management** 88, 96, 166, 264, 341, 342, 415, 426, 451, 576, 654, 768, 816, 848, 853, 931, 1076, 1094, 1158, 1243, 1248, 1334, 1443, 1487, 1553, 1559
- resource utilization** 1258
- resources management** 227, 431, 816, 1248, 1443, 1633
- respiration** 1369, 1522
- restoration** 345, 696, 1270, 1346, 1630, 1676
- restoration cost estimation** 334
- Restoration ecology** 217, 305, 718, 1354, 1431, 1788
- Restoration ecology---Congresses** 1353
- Restoration ecology---Mexico** 1426
- Restoration ecology---Mexico---Case studies** 1426
- Restoration ecology---Northeastern States** 1783
- Restoration ecology---Prairie Pothole Region** 1354
- Restoration ecology---Southwest, New** 1426
- Restoration ecology---Southwest, New---Case studies** 1426
- Restoration ecology---United States Evaluation** 103
- restoration management** 1348
- restoration peatland** 659
- restoration potential** 421
- resuspended sediment** 1468
- Resuspended sediments** 1383, 1670
- resuspension** 1383
- Retention** 1084, 1116, 1162, 1468
- return flow** 1031
- returns** 407
- Revegetation** 193, 215, 436, 1429, 1665, 1752
- Revegetation---United States** 633
- Revegetation---West---United States** 1701
- review** 1419
- reviews** 6, 9, 10, 11, 13, 26, 32, 37, 38, 40, 47, 49, 51, 58, 61, 62, 63, 64, 68, 72, 73, 74, 79, 85, 95, 106, 108, 112, 118, 120, 130, 139, 147, 148, 153, 157, 160, 162, 167, 168, 170, 171, 173, 176, 180, 181, 182, 184, 186, 188, 191, 195, 198, 202, 203, 204, 207, 216, 219, 252, 256, 259, 274, 275, 279, 282, 287, 294, 300, 301, 303, 318, 319, 321, 326, 329, 335, 339, 343, 344, 349, 351, 358, 359, 371, 376, 383, 384, 387, 388, 399, 400, 407, 414, 417, 424, 431, 432, 433, 435, 439, 442, 447, 452, 453, 466, 467, 481, 486, 493, 494, 505, 507, 508, 511, 533, 534, 537, 538, 541, 547, 549, 558, 573, 589, 591, 592, 593, 598, 609, 611, 616, 619, 620, 621, 627, 629, 635, 638, 645, 651, 652, 666, 668, 671, 676, 677, 682, 685, 686, 688, 690, 696, 697, 700, 706, 712, 721, 722, 740, 749, 754, 756, 758, 787, 788, 804, 810, 815, 824, 830, 835, 841, 843, 845, 847, 849, 855, 862, 864
- reviews (contd.)** 873, 876, 881, 888, 891, 893, 894, 907, 910, 911, 918, 926, 928, 930, 934, 936, 942, 945, 947, 950, 964, 969, 977, 985, 987, 991, 994, 1001, 1003, 1004, 1008, 1011, 1012, 1014, 1016, 1024, 1028, 1029, 1034, 1037, 1038, 1039, 1044, 1046, 1066, 1073, 1087, 1088, 1089, 1090, 1097, 1098, 1102, 1103, 1104, 1115, 1121, 1125, 1128, 1134, 1162, 1163, 1165, 1167, 1168, 1172, 1173, 1183, 1187, 1190, 1191, 1203, 1204, 1208, 1216, 1219, 1226, 1229, 1230, 1231, 1237, 1240, 1243, 1249, 1255, 1264, 1266, 1282, 1290, 1294, 1297, 1304, 1305, 1318, 1324, 1326, 1328, 1331, 1337, 1343, 1344, 1355, 1358, 1362, 1366, 1367, 1371, 1372, 1377, 1378, 1379, 1385, 1389, 1390, 1392, 1396, 1398, 1399, 1403, 1410, 1415, 1418, 1435, 1442, 1443, 1446, 1447, 1450, 1454, 1456, 1467, 1469, 1482, 1484, 1485, 1486, 1491, 1492, 1494, 1495, 1510, 1511, 1512, 1516, 1517, 1519, 1520, 1528, 1539, 1541, 1543, 1546, 1548, 1563, 1566, 1568, 1569, 1575, 1579, 1581, 1584, 1587, 1590, 1595, 1604, 1616, 1617, 1622, 1624, 1628, 1640, 1641, 1643, 1644, 1646, 1648, 1650, 1651, 1657, 1659, 1665, 1668, 1669, 1671, 1674, 1681, 1682, 1683, 1684, 1687, 1688, 1689, 1690, 1691, 1693, 1695, 1696, 1700, 1702, 1706, 1711, 1718, 1731, 1732, 1735, 1736, 1741, 1767, 1770, 1785, 1791
- revised universal soil loss equation** 715
- rhizobacteria (Bacteria General Unspecified)** 1619
- rhizobium** 894, 1488
- rhizosphere** 652, 1169, 1216, 1640
- Rhodamine WT dye** 1397
- Rhodococcus coprophilus** 372
- ribosomal DNA** 1118
- ribosome inactivating proteins: insecticide** 1177
- Rice** 433, 543, 786, 810, 1421
- rice fields** 37, 433
- rice soils** 1790
- ridging** 855
- rill erosion** 41, 318, 437, 715, 1156, 1276, 1542
- Ring necked pheasant** 1221
- riparian** 1451
- Riparian animals---United States** 1440
- riparian aquatic ecosystem linkages** 701

Subject Index

- riparian areas 485, 577, 1171, 1307, 1423, 1720
- Riparian areas---East---United States---Management 1432
- Riparian areas---Idaho---Management 626
- Riparian areas---Management 574, 1425
- Riparian areas---United States 639, 1440
- Riparian areas---United States---Management 1703
- riparian buffer 1532
- riparian buffers 577, 860, 1301
- riparian communities 809
- riparian ecology 194, 712
- Riparian ecology---California---Sierra Nevada---Handbooks, manuals, etc 386
- Riparian ecology---Chesapeake Bay---Md and Va---Handbooks, manuals, etc 233
- Riparian ecology---Handbooks, manuals, etc 1434
- Riparian ecology---Mathematical models 1425
- Riparian ecology---Mexico 1426
- Riparian ecology---Mexico---Case studies 1426
- Riparian ecology---Nevada---Sierra Nevada---Handbooks, manuals, etc 386
- Riparian ecology---Southwest, New 1426
- Riparian ecology---Southwest, New---Case studies 1426
- Riparian ecology---United States 610, 633, 639, 1238
- Riparian ecology---United States---Management 946
- Riparian ecology---West---United States 1701
- riparian ecosystem 803
- riparian ecosystem ecology: livestock impact susceptibility 1431
- riparian ecosystems 794
- riparian ecotones 421, 1352
- Riparian environments 62, 193, 205, 227, 566, 598, 658, 1358, 1435, 1462, 1597, 1600
- riparian forest 860
- riparian forests 88, 96, 174, 384, 398, 400, 577, 584, 712, 1081, 1089, 1312, 1317, 1340, 1350, 1351, 1424, 1427, 1430, 1433, 1436, 1441, 1604, 1720, 1752
- Riparian forests---Chesapeake Bay---Md and Va 564, 1428
- Riparian forests---Chesapeake Bay---Md and Va---Handbooks, manuals, etc 233
- Riparian forests---Chesapeake Bay Watershed---Md and Va 1745
- Riparian forests---East---United States---Management 1432
- Riparian forests, Effect of water pollution on 121
- riparian grasslands 76, 210, 384, 388, 712, 824, 845, 1227, 1422, 1429, 1436, 1520, 1604
- riparian habitat 463, 1242
- riparian habitats 630
- riparian habitats protection 1361
- riparian land 205, 988, 1117, 1358, 1597, 1600
- riparian livestock enclosure research: critique, recommendations 1431
- riparian meadows: habitat 823
- riparian plant communities 334
- Riparian plants 1438
- Riparian plants---Monitoring---United States 946
- Riparian plants---United States---Nutrition 1320
- riparian restoration: community scale, stream reach scale 1672
- riparian rights 1215
- riparian vegetation 52, 54, 88, 96, 125, 127, 184, 205, 227, 333, 398, 400, 530, 658, 673, 688, 711, 796, 798, 824, 1039, 1202, 1227, 1234, 1242, 1312, 1323, 1349, 1351, 1424, 1427, 1430, 1435, 1437, 1461, 1616, 1665, 1672, 1752
- riparian wetlands 1267
- Riparian zone 799
- riparian zone integrity 701
- riparian zones 389, 800, 806, 1278
- Risk 197, 349, 479, 685, 1046, 1230, 1231, 1235, 1443, 1445, 1446
- Risk analysis 1235, 1249, 1442
- Risk assessment 149, 173, 192, 349, 394, 411, 439, 479, 599, 620, 646, 730, 1112, 1113, 1156, 1179, 1196, 1201, 1235, 1249, 1294, 1402, 1442, 1444, 1445, 1446, 1447, 1448, 1532, 1576, 1690, 1706, 1791
- risk assessment implications 135
- risk factors 408
- risk management 368, 408, 1179
- RISK N model 160
- risk reduction 638, 653, 1444
- risks 1121, 1791
- river 1315, 1487
- river banks 890
- River basin management 62, 227, 1215, 1443, 1597
- river basins 1306, 1352, 1495, 1581
- river biotic community 809
- river channels 654
- river channels: form, processes 603
- river channels: geometry 806
- River channels---Southwestern States 554
- river continuum concept 1068
- river corridors 801
- River discharge 1581
- river engineering 569, 1638, 1676
- River fisheries 804
- River Flow 1724
- river flow regime 809
- river management 806, 1600
- river margins 1267
- river mechanics 890
- river organization 603
- river pollution 1179
- river regulation 569, 1350, 1752
- river regulations 1337
- river restoration 694
- River Rhine 654
- river sedimentation 165
- River sediments---United States---Analysis 1069
- river valleys 602
- river water 1046, 1404
- riverbank protection 1092, 1312, 1599
- riverine inputs 133
- riverine landscapes 603, 1451
- rivers 62, 170, 184, 210, 227, 343, 389, 398, 602, 768, 799, 813, 890, 892, 1011, 1092, 1162, 1223, 1239, 1287, 1312, 1323, 1368, 1395, 1435, 1450, 1454, 1462, 1600, 1645, 1676, 1724, 1814
- Rivers---Environmental aspects---Mexico, Gulf of 420
- Roads 424, 1317
- Rock Mechanics 617
- rocks 437
- rodents 1206
- rogram nawqa 1041
- root hydraulic conductivity 937, 1166
- root maggots 563
- root pathogens 114
- root penetration 1025
- root systems 621, 1002, 1166, 1378, 1488
- Root Zone 1634
- root zone acidity 423
- rooting 6, 1033, 1482
- rooting depth 6, 302
- roots 12, 138, 319, 363, 445, 621, 1266, 1345, 1385, 1481, 1482, 1488, 1549, 1790
- rotary cultivation 788
- rotations 12, 91, 105, 153, 277, 302, 365, 375, 407, 445, 464, 593, 668, 672, 677, 678, 693, 749, 855, 869, 894, 997, 1008, 1009, 1063, 1112, 1200, 1219, 1234, 1264, 1304, 1355, 1389, 1394, 1472, 1557, 1640, 1642, 1767, 1770
- rotenoids: insecticide, natural product 968

- Roundup: pesticide, surfactant** 396
- rubber band model** 1431
- rubus** 1773
- rumen fluid** 1470
- rumen microorganisms** 1470
- ruminant (Artiodactyla): host** 1303
- ruminant feeding** 1416
- runoff** 15, 19, 46, 123, 147, 162, 301, 303, 415, 418, 441, 444, 445, 502, 509, 510, 525, 545, 611, 642, 657, 671, 683, 684, 685, 688, 722, 726, 768, 821, 829, 865, 874, 884, 892, 947, 1005, 1011, 1018, 1037, 1039, 1065, 1120, 1136, 1156, 1157, 1161, 1194, 1211, 1241, 1259, 1268, 1298, 1376, 1386, 1392, 1401, 1504, 1505, 1506, 1532, 1549, 1643, 1645, 1719, 1759, 1764
- Runoff (Agricultural)** 344, 1159, 1581
- runoff generation** 1729
- runoff pathway** 498
- Runoff---United States** 269, 489
- runoff water** 30, 1072, 1302, 1684, 1719
- rural areas** 65, 530, 1141
- rural residence** 1270
- Russia** 1462
- S metolachlor: herbicide** 908
- Safety** 448, 939, 1364, 1379
- safety considerations** 220
- safety engineering** 939
- safety regulations** 939
- salicornia** 1490
- salicornia bigelovii** 1490
- saline soils** 63, 1328, 1488
- saline water** 1063, 1205, 1288, 1490, 1682, 1739
- saline water usage** 781
- salinity** 64, 653, 657, 721, 770, 1063, 1205, 1225, 1287, 1288, 1488, 1699, 1739
- salinity: contaminant partitioning controlling factor, interstitial, lateral variation, overlying, temporal variation, vertical variation** 122
- Salinity effects** 721, 770, 1510
- Salinity tolerance** 1510
- salinization** 44, 63, 1225, 1328, 1682
- salinization: secondary** 1487
- salix** 361, 584, 1089, 1312, 1427, 1604, 1752
- salix gooddingii** 584
- Salmo trutta** 1411
- Salmon** 1403
- Salmon fisheries---Columbia River--Watershed** 1489
- Salmonella** 351, 1072, 1103
- salmonid (Osteichthyes): anadromous** 166
- Salmonidae** 598, 1223, 1814
- Salmonids** 598, 1223
- salt** 1225
- salt marsh** 1267
- Salt Marshes** 1510
- salt tolerance** 63, 1063, 1205, 1490, 1510, 1682
- salt wedge estuaries** 122
- salts** 1482, 1720
- salvage felling and logging** 821
- Salvelinus fontinalis** 1411
- sample preparation method** 1593
- sample processing** 1533
- sample recovery** 78
- Sample storage** 511
- Samples** 1646
- sampling** 34, 109, 112, 175, 342, 516, 666, 995, 1118, 1511, 1533, 1612, 1647, 1693
- sampling effects** 665
- Sampling methods** 34
- sand deposition** 1267
- sandbars** 794
- sandy coarse soils: nutrient leaching susceptibility** 1692
- sandy loam soils** 993
- sandy soil cropping systems: nitrogen status, nutrient balancing** 1692
- sandy soils** 986, 993, 1161, 1519, 1642
- sanitation** 31, 1102
- sap** 1002, 1490, 1591
- Saskatchewan** 1793
- Satellite imagery** 1363, 1491, 1492
- satellite methods** 1307
- Satellite sensing** 1493
- satellite surveys** 782
- Satellite Technology** 1363
- Satellites** 1493
- saturated flow** 246
- saturated hydraulic conductivity** 246, 1304
- scale** 1532, 1758
- scale issues** 1495
- scale models** 1774
- Scaling** 804
- schizophora** 175
- scientist perceptions** 1808
- sea water** 1490
- seas** 133
- seasonal dynamics** 421
- seasonal estuarine variability** 122
- seasonal variation** 5, 212, 474, 1000, 1082, 1169, 1194, 1429, 1698
- seasonality** 823, 1051, 1635
- secale cereale** 1715
- secondary carbonates** 7
- Secondary publication and distribution** 1015, 1133
- Section 319 National Monitoring Program** 1500, 1501, 1502, 1503
- sediment** 41, 91, 134, 164, 170, 202, 326, 345, 389, 394, 396, 480, 525, 539, 602, 722, 865, 909, 961, 1031, 1092, 1095, 1278, 1305, 1360, 1369, 1427, 1454, 1522, 1530, 1588, 1670, 1718, 1764, 1766
- Sediment analysis** 108, 109, 112, 1607
- sediment caliber** 603
- Sediment chemistry** 108, 167, 263, 339, 942
- sediment concentration** 109, 110
- sediment contamination** 108, 130, 167, 1453, 1476, 1507
- sediment contamination: estuarine, historic, ongoing** 122
- sediment delivery** 1061
- sediment deposition** 654, 1278, 1720
- sediment diagenesis** 927
- Sediment dynamics** 1724
- sediment inputs** 694
- Sediment Load** 109, 438, 1638, 1676
- sediment loss** 657
- sediment permeability** 801
- Sediment pollution** 93, 109, 110, 112, 130, 137, 148, 167, 934, 1362, 1379, 1466, 1516, 1630, 1648
- sediment: quality** 603, 1179, 1186, 1508
- sediment quality guidelines [SQGs]: criteria** 1507
- sediment reactions** 1287
- sediment release** 1212
- sediment removal** 1212
- sediment resuspension** 1356, 1618
- sediment sampler** 109
- Sediment sampling** 112
- sediment tracers** 1315
- sediment transport** 1, 108, 110, 603, 654, 924, 928, 1012, 1226, 1239, 1315, 1509, 1676
- Sediment transport---Measurement** 559
- Sediment transport---Southwestern States** 554
- Sediment transport---United States** 1283, 1284
- sediment trapping ponds** 865, 1031
- sediment traps** 1267
- sediment water interface** 263
- sediment water interfaces** 263
- sediment yield** 295, 437, 507, 542, 629, 1031, 1268
- Sedimentary Basins** 109, 111
- sedimentation** 24, 109, 111, 146, 295, 344, 438, 598, 1267, 1312, 1383, 1437, 1518, 1550, 1575, 1630, 1638

Subject Index

- Sedimentation and deposition---**
Environmental aspects---
United States 709
- Sedimentation and deposition---**
Southwestern States 554
- Sedimentation and deposition---**
United States 1262
- sedimentation sites** 694
- sediments** 3, 109, 110, 111, 112, 122, 130, 137, 263, 339, 426, 504, 802, 1110, 1259, 1296, 1383, 1418, 1613, 1648, 1670, 1724
- Sediments---Geology** 1023
- Sediments---Geology---Analysis** 904
- Sediments---Geology---Toxicology--United States** 586
- seed banks** 391, 478, 693, 1250, 1267, 1331, 1348, 1510, 1511, 1698, 1770
- seed dispersal mechanisms** 1348
- seed dormancy** 478
- seed germination** 384, 478, 750
- seed output** 391, 523, 970
- seedbed preparation** 1410
- seedling emergence** 478, 642, 1410, 1444
- seedlings** 325, 810, 1665
- seeds** 1490, 1510, 1511, 1770
- seepage** 541, 1513
- selection** 116
- selection pressure** 265, 1637
- selection program** 1033
- selenium** 44, 188, 857, 1469, 1517, 1682
- Selenium---Environmental aspects--West (United States)** 780, 1709
- selenium: environmental standards, national water quality criterion, pollutant** 1755
- selenium laden soil** 613
- selenium: pollutant, toxin** 613
- selenium: trace metals** 487
- selenoprotein** 613
- self design** 520
- semi arid regions** 1487
- Semi enclosed seas** 222
- semiarid climate** 36
- semiarid regions** 1307
- semiarid zones** 15, 63, 888, 1227, 1288, 1378, 1427, 1631
- semiochemicals** 458, 743
- sensitivity** 915
- sensors** 450, 505, 1054, 1328, 1687
- sensory evaluation** 1677
- separation** 1518, 1572
- Separation processes** 75
- separators** 1572
- septic tanks** 972
- sequestration** 278
- sesquioxides** 867
- sewage** 180, 287, 372, 697, 1004, 1258, 1442, 1581
- Sewage disposal in the ground** 1760
- Sewage disposal---United States** 496
- sewage effluent** 142, 1046
- sewage effluents** 1536
- Sewage lagoons---North Carolina---Hydrodynamics** 1222
- Sewage---Purification---Biological treatment** 286, 289, 1664
- Sewage---Purification---Biological treatment---United States---Case studies** 288
- Sewage---Purification---Cold weather conditions** 289
- Sewage Purification---Handbooks, manuals, etc** 632
- sewage sludge** 142, 149, 464, 483, 697, 955, 1102, 1161, 1617, 1653
- Sewage sludge as fertilizer** 1760
- Sewage sludge---Disinfection---United States** 496
- Sewage treatment plants** 1581
- sewage & wastewater treatment** 287, 292, 697, 973, 1078, 1115
- sewer overflow** 1453
- sex differences** 692
- Sexual Reproduction** 442, 1469
- shade** 443
- shaded perennial** 552
- shading effects** 814
- shallow depths** 1110
- shallow groundwater** 1141, 1288
- SHE model** 1764
- sheep** 609, 1460, 1485, 1520, 1521
- sheep feeding** 1470
- sheep manure** 878, 1470
- sheet erosion** 41, 1156
- shellfish** 435, 635, 961
- shellfish (Invertebrata)** 166
- shelterbelts** 52, 54, 443, 530, 841, 1394, 1477, 1666, 1812
- shelterwood** 1045
- shifting cultivation** 1667
- shipworm (Oligochaeta)** 354
- shock absorption capacity** 307
- shoots** 1266, 1591
- short rotation forest systems** 1027
- Short term changes** 1493
- short term productivity** 1374
- shrub cover** 665
- shrubland declines** 1625
- shrubs** 340, 1812
- sidedressing** 1710
- Sierra Nevada** 521
- sieving** 1518
- significance** 915
- silicate** 605
- silt** 1304, 1549
- silt loam soil** 275, 327, 930
- silvicultural systems** 436, 711
- silviculture** 573, 1698
- simazine** 833
- simazine: aerial fallout rain concentrations, application rate, bioaccumulation, disappearance time, dissipation, fate, field effects, fresh water concentrations, herbicide, lower trophic level effects, phytotoxicity, pollutant, sediment decomposition, to** 553
- simulated rainfall** 1278
- simulation** 160, 378, 525, 587, 1294, 1518, 1532, 1570, 1712
- simulation model** 766, 1532
- simulation models** 66, 106, 123, 124, 138, 330, 341, 394, 441, 454, 510, 540, 587, 691, 695, 715, 798, 805, 893, 926, 929, 932, 933, 937, 940, 998, 999, 1096, 1336, 1376, 1458, 1523, 1564, 1576, 1775
- site factors** 94, 450, 526, 1169
- site index** 1161
- site preparation** 441, 474, 579, 1624, 1698
- Site Selection** 1435
- site specific crop management** 224, 1327
- size** 965
- slash** 821
- slaughter weight** 1302
- slope** 507, 715, 1766
- sloping land** 226, 1548
- slow release fertilizers** 1002
- Sludge** 191, 697, 948
- Sludge Disposal** 191, 1442, 1528
- Sludge drying** 1528
- sludge pollution** 1466
- Sludge stabilization** 1528
- Sludge thickening** 1528
- Sludge treatment** 1528
- Sludge utilization** 1528
- sludges** 1324
- slurries** 16, 34, 66, 383, 417, 483, 534, 881, 893, 899, 994, 1001, 1240, 1281, 1376, 1381, 1382, 1529, 1702
- small farms** 127, 1295
- small fruits** 1773
- snails (Gastropoda)** 1635
- snowmelt erosion** 1524
- social changes** 1639
- social costs** 41
- social forestry** 1667
- social impact** 734, 1487
- social indicators** 792
- social values** 768, 1515
- Societies and institutions** 266
- socioeconomics** 530, 551
- sociological analysis** 1531
- Sociological aspects** 1076
- sodium** 64, 1490
- sodium chloride** 1490, 1737
- sodium dithionite** 581
- sodium hydroxide** 581
- sodium hypochlorite** 581

- sodium pyrophosphate** 581
soft sediment habitat 354
soft water wetlands 1347
soil 66, 91, 94, 160, 186, 205, 215, 300, 340, 383, 394, 396, 474, 475, 480, 517, 534, 537, 558, 573, 587, 642, 671, 677, 684, 759, 817, 821, 847, 863, 867, 886, 909, 945, 994, 1001, 1011, 1103, 1134, 1153, 1183, 1195, 1298, 1304, 1318, 1338, 1378, 1409, 1413, 1472, 1511, 1523, 1538, 1547, 1553, 1565, 1567, 1569, 1571, 1573, 1588, 1642, 1643, 1657, 1660, 1674, 1729
Soil absorption and adsorption---Research---North Carolina 1222
Soil Absorption Capacity 1753
soil acidification 989
soil aeration 1064
soil aggregates 114
soil aging 200
soil air 440, 867, 941, 1266
soil air exchange 134
Soil amendment 697
soil amendments 64, 228, 319, 847, 1000, 1025, 1037, 1154, 1488, 1533
soil analysis 356, 1322
soil arthropods 105
soil bacteria 105, 868, 899, 1118, 1585, 1790
soil biological properties 1552
soil biology 5, 60, 105, 117, 213, 224, 226, 229, 540, 784, 867, 868, 899, 917, 990, 998, 1003, 1020, 1060, 1537, 1566
soil carbon 7
soil chemical properties 319, 627, 1543, 1552, 1566
soil chemistry 204, 213, 226, 229, 279, 719, 867, 1029, 1084, 1202, 1533, 1561, 1568
soil columns 1660
soil community composition 1540
soil compaction 224, 281, 303, 319, 330, 621, 930, 1025, 1230, 1231, 1248, 1266, 1276, 1385, 1570, 1624
soil conservation 15, 41, 63, 106, 194, 273, 279, 437, 507, 509, 536, 537, 611, 672, 803, 841, 1008, 1065, 1182, 1189, 1230, 1231, 1248, 1298, 1366, 1454, 1460, 1592, 1641
Soil conservation---United States 269, 1283, 1544
Soil conservation---Washington State---Columbia Plateau 1810
Soil conservation---West---United States 1701
Soil Contamination 3, 4, 331, 337, 390, 670, 918, 922, 1119, 1362
soil crustability 18
soil degradation 7, 224, 226, 341, 551, 591, 629, 679, 869, 1338, 1535, 1539, 1541, 1545, 1616, 1622, 1631, 1688
soil depth 41, 275, 1060, 1549
soil disposal fields 973
soil emissions 132, 1636
Soil environment 332, 1585
soil enzymes 1522, 1543
soil erodibility 18
soil erosion 281, 364, 390, 419, 429, 437, 449, 525, 536, 736, 1188, 1248, 1271, 1287, 1535, 1550, 1656, 1740
Soil erosion---Mathematical models 797
Soil erosion prediction---United States 1224
Soil erosion---United States 269, 1224, 1283, 1544
Soil erosion---United States---Mathematical models 797
soil exhaustion 1355, 1622
soil fauna 410, 411, 686, 722, 784, 1555, 1556, 1693
soil fertility 63, 213, 218, 224, 226, 228, 229, 275, 311, 319, 375, 414, 425, 428, 445, 507, 551, 627, 652, 653, 726, 784, 810, 846, 869, 870, 911, 917, 929, 945, 971, 997, 998, 1002, 1008, 1020, 1028, 1060, 1082, 1118, 1156, 1157, 1174, 1234, 1269, 1304, 1327, 1336, 1355, 1488, 1519, 1549, 1551, 1552, 1564, 1566, 1622, 1624, 1710, 1715, 1719
Soil fertility---Great Britain---Management 751
soil fertility management 1552
soil flora 5, 47, 213, 226, 483, 540, 678, 784, 894, 917, 945, 990, 998, 1000, 1020, 1202, 1304, 1376, 1522, 1543, 1556
soil formation 1533, 1549
soil fumigant 704
soil fumigation 12
soil fungi 105, 1216
soil health 1554, 1556
soil heaths 1536
soil injection 66
soil invertebrates 1555, 1693
Soil Loss 525, 902
soil management 29, 91, 364, 382, 453, 558, 614, 679, 684, 867, 870, 899, 991, 997, 1028, 1236, 1338, 1410, 1472, 1535, 1549, 1557, 1560, 1565
Soil management---Illinois 837
soil mechanics 617, 1230, 1231
Soil microbiology 904
soil microorganism (Microorganisms) 332
soil microorganism risk potential 915
soil microorganisms 900, 1538
soil morphology 1276
soil movement 1542, 1570
soil nitrogen: availability 1636
soil nutrient dynamics 218
soil nutrients 225, 364, 517, 1322, 1568
soil organic carbon 213, 517
soil organic matter 5, 47, 105, 213, 215, 226, 275, 371, 507, 573, 695, 719, 720, 989, 997, 998, 1000, 1025, 1060, 1067, 1082, 1158, 1192, 1198, 1318, 1327, 1338, 1472, 1519, 1539, 1549, 1556, 1557, 1624, 1627, 1641, 1642, 1669
soil organic nitrogen 986
soil organism (Organisms) 1540
soil pH 55, 226, 719, 1027, 1198, 1240, 1652
soil phosphorus sorption 1064
soil physical 95, 319, 627, 722, 1266, 1472, 1519, 1543, 1566, 1624, 1669, 1682
soil physical properties 94, 226, 302, 450, 600, 719, 867, 1318, 1552
soil plant health harmonization 1552
soil pollution 33, 35, 93, 187, 188, 200, 326, 363, 439, 483, 627, 645, 728, 970, 1037, 1046, 1067, 1120, 1132, 1168, 1169, 1324, 1362, 1457, 1466, 1471, 1517, 1555, 1578, 1653, 1690
Soil Pollution: Monitoring, Control & Remediation 186, 1442
soil pore system 868, 1247
soil productivity 459
soil profiles 558
soil properties 200, 205, 437, 1126, 1250, 1269, 1715, 1753, 1793
soil properties: chemical, physical 1348
soil properties: water content 1524
soil quality 114, 277, 485, 945, 1192, 1200, 1471, 1519, 1538, 1554, 1556, 1566, 1571, 1740
soil quality protection 1692
soil remediation 186, 1362
soil residue data 134
soil resources 1553, 1567
soil restoration 7
soil salinity 63, 428, 450, 1063, 1328, 1682, 1690, 1714
soil science 18, 165, 257, 278, 459, 528, 558, 704, 723, 1025, 1064, 1364, 1619
soil sequences 1793
soil sickness 60
soil solution 440, 1241, 1345, 1643
soil spiking procedures 1588
soil stabilization 695, 1183, 1478
Soil stabilization---United States 765

Subject Index

- soil structure** 47, 105, 277, 301, 652, 695, 851, 930, 1266, 1276, 1318, 1519, 1533
soil surface 1276
soil surface runoff 1129
soil surveys 330
soil temperature 226, 279, 440, 478, 677, 678, 695, 1082, 1266, 1770
soil testing 30, 995
soil texture 275, 695, 715, 719, 1194, 1519
soil thermal properties 1326
Soil tillage for crop production and protection of the environment 621, 1669
soil types 64, 275, 277, 326, 371, 439, 627, 645, 677, 695, 947, 1046, 1049, 1168, 1328, 1392, 1482, 1517, 1519, 1531, 1539, 1690, 1693, 1753
soil variability 855, 1126
soil water 49, 138, 301, 302, 611, 677, 695, 719, 868, 935, 1096, 1219, 1327, 1413, 1482, 1570, 1669
soil water balance 684, 1039
soil water content 47, 63, 94, 226, 300, 440, 478, 642, 678, 870, 1033, 1230, 1385, 1549
soil water filled pore space 868
soil water movement 1083, 1266, 1385, 1720
Soil water plant Relationships 160
soil water retention 36, 947, 1385
soil wetness 659
soils 186, 504, 661, 829, 900, 915, 1613, 1614
Soils---Analysis 904
Soils, Irrigated 1621
Soils---Nitrate content---Illinois---Measurement 837
Soils---Nitrogen content 338
Soils---Nitrogen content---Sweden 296
Soils---Pesticide content---Illinois---Measurement 837
Soils---Quality 1537
Soils, Salts in 1621
Soils, Salts in---Research---United States 1562
solanum melongena 705
solanum tuberosum 677, 1715
solar energy 1460
solar energy transmission 701
solar radiation 92, 1240
solid phase extraction 75, 1152, 1593
solid phase microextraction 1593
solid wastes 1004, 1518, 1572
Solids 191
solubility 440, 867, 1302, 1448, 1561
Solute transport 276, 378, 924, 928, 1012
solutes 558, 722, 1482, 1490, 1643
Solvents 789, 1167
sorghum 319, 407, 786, 1219
Sorghum bicolor 319, 407
sorption 3, 9, 123, 263, 327, 439, 618, 620, 642, 789, 1039, 1046, 1120, 1134, 1395, 1470, 1643
sorption isotherms 1561
source area hydrology 1729
source reduction 1158
source water quality 854
sources 453, 1675
Sources and fate of pollution 3, 4, 20, 29, 108, 109, 112, 139, 322, 331, 335, 337, 339, 351, 372, 390, 412, 413, 542, 543, 544, 919, 920, 924, 925, 928, 934, 1004, 1012, 1013, 1015, 1017, 1049, 1093, 1116, 1117, 1119, 1133, 1135, 1147, 1150, 1162, 1235, 1314, 1375, 1395, 1412, 1442, 1445, 1464, 1575, 1579, 1580, 1581, 1585, 1782
South African highveld 986
South America 1768
South Carolina 436, 441
southeastern states of USA 203, 640, 982, 1045, 1802
Southern High Plains 1100
southern pinelands 641
Southwestern states of United States 1708
sow lactation 1737
sow pregnancy 1737
sowing 153
sown grasslands 549
soyabean (Leguminosae): oil crop 473
soybean mosaic potyvirus 691
soybean mosaic potyvirus (Potyvirus) 691
soybeans 786
spatial change 307
spatial cohesion 795
Spatial Distribution 510, 833, 935, 1133, 1306, 1345, 1379, 1510, 1515, 1581, 1666
spatial estuarine variability 122
spatial heterogeneity 1437
spatial models 928
spatial optimization 1061
spatial patterns 794
spatial patterns: quantification 665
spatial pva models 512
spatial scale processes 694
spatial scales 1250, 1723
spatial sensitivity 802
spatial variability 1051
spatial variation 36, 94, 341, 365, 371, 441, 510, 599, 611, 627, 629, 798, 855, 910, 1118, 1266, 1385, 1530, 1584, 1585, 1612, 1789
spatial variations 801
spatially explicit data 665
spawning habitat 654
species 1332
species abundance 1317, 1357
species composition 162, 238, 368, 429, 724, 1672
species differences 425, 579, 757, 1458, 1666
species diversity 154, 155, 175, 212, 271, 384, 398, 436, 484, 566, 653, 690, 732, 749, 769, 814, 891, 971, 1101, 1118, 1172, 1233, 1306, 1317, 1357, 1365, 1427, 1437, 1457, 1467, 1481, 1634, 1667, 1789
Species interactions: general 598
Species interactions: parasites and diseases 1098
Species interactions: pests and control 431, 1073, 1575
species richness 641, 722, 891, 1172, 1725
species selective pest control agents: pesticide 727
specific biochemical work 1361
specific gravity 1281
specific molecular work 1361
specific pH 368
Spectral analysis 1413
Spectral composition 1413
Spectral reflectance measurements 1413
spectral signatures 1413
Spectrometry (Mass) 1115
spectrophotometry 1289
Spermatophyta (Spermatophyta) 53
spermatophytes 53, 115, 116, 128, 177, 179, 234, 235, 254, 257, 429, 463, 473, 502, 552, 613, 641, 643, 667, 669, 694, 701, 716, 724, 785, 823, 850, 908, 952, 1025, 1153, 1251, 1483, 1496, 1619, 1673, 1692, 1714, 1768
Sphagnum (Sphagnobrya) 659
Spiders 689
spillways 111, 805, 1765
spinacia oleracea 1715
split dressings 1002, 1710, 1717
Sport fishing 1411
spray dispersal modeling 366
spraying 1671, 1681, 1813
spring fed 498
spring snowmelt 659
springs 823, 969
springtails (Collembola) 1635
sprinkler irrigation 444, 462, 1359
Spurgia esulae [spurge gall midge] (Diptera): biological control agent 177
stability 94, 345, 1533
stabilizing 1527
stable isotopes 1563
stage plane beds 1509
stakeholder perceptions 1808
stakeholders 1804
stand density 436

- stand dynamics** 429
stand establishment 579
stand structure 484, 1045, 1349
standards 99
state government 1759
State Jurisdiction 816
Statistical analysis 79, 246, 372, 1147, 1235, 1294, 1314, 1372, 1585
statistics 171
steady state conditions 916
steam 1009
steppes 690, 1349
Stock assessment and management 566, 804, 1462
stock rehabilitation 1352
Stocking (organisms) 1223
stoichiometry 605
stomata 937
stomatal movement 1591
stomatal resistance 523, 621, 1225
stomatal uptake 132
storage 163, 301, 534, 1402, 1731
Storm sewers---Handbooks, manuals, etc 632
storm water sampling 136
storms 441
stormwater contamination 1476
stormwater runoff 532
stormwater treatment wetlands 532
strategies 136
stratification 112, 1618
stratification types 1509
stratigraphy 802
stream 396, 585
Stream Biota 1411
stream channels 1599
Stream conservation---Handbooks, manuals, etc 1434
Stream conservation---Idaho 626
Stream conservation---United States 1238
stream ecology 794
stream erosion 361, 1312
Stream flow 526, 1092, 1223, 1312, 1351, 1424
Stream flow---Environmental aspects---Mexico, Gulf of 420
stream flow rate 569, 1676
stream improvement 345
Stream measurements---Illinois---Cache River 323
stream reaches 334
stream restoration 1599
stream shade 701
stream vegetation 421
stream visual assessment protocol 1600
Streambank planting 1438
Streambank planting---United States 1320
streamflow 569, 1676
Streamflow and runoff 184, 658, 1226, 1239, 1377, 1435, 1600
Streamflow forecasting 1377
streams 41, 79, 107, 184, 193, 205, 227, 343, 361, 389, 436, 438, 598, 640, 711, 798, 801, 804, 813, 823, 824, 1089, 1162, 1223, 1369, 1396, 1441, 1452, 1461, 1495, 1597, 1600, 1616
Streams (in natural channels) 1226, 1600
streamwater quality 1746
streptomycin: antibacterial drug 90
streptomycin: antiinfective drug 90
stress 333, 971, 1172, 1185, 1457, 1469, 1735
stress factors 1481
stress response 1172, 1481
stresses 930, 1230, 1231, 1812
strip cropping 54, 507, 865
Strip mining---Environmental aspects 631
strix occidentalis 1708
structural effects 814
Structural engineering 939
structure 174, 184, 1304, 1318, 1378, 1775
structure activity relationships 231, 727, 1294
structures 227, 939, 1402
strychnine 662
stubble height 1278
study methodology 902
study popularization 1431
subaqueous dunes 1509
subarctic nival 498
subcellular responses 1476
Subirrigation---Congresses 1606
Subirrigation---Sweden 296
sublethal effects 533, 1122, 1387, 1406, 1469
Submerged Plants 1073, 1159
subsidies 1587
subsistence 1667
subsoil 330, 337, 1230, 1231, 1385
subsoils 100
substituted urea pesticides: determination, pollutant, extraction 1613
substrate induced respiration 915
substrates 110, 1607
subsurface drainage 44, 378, 947, 1116, 1288, 1386
Subsurface drainage---Materials 887
subsurface flow 421
subsurface flow constructed wetlands 1525
subsurface irrigation 1608, 1609
subsurface layers 301
subsurface runoff 929, 1039, 1158
succession 669
sugar beet (Chenopodiaceae): sugar crop 473
sulfate 1368, 1479
sulfate reducing bacteria (Bacteria): biological control agent 1662
sulfate reduction 1479
Sulfide 167
Sulfides 167
sulfometuron methyl 542, 640
sulfonylureas herbicides 640
sulfonylureas: herbicide, hydrolysis, pyridinic ring, pyrimidine ring, triazinic ring 661
sulfur 20, 213, 846, 1154, 1419, 1555, 1556
sulfur: pollutant 674
Sulphides 167
sun 579
sunflowers 407, 1355
supercritical fluid chromatography 1289
supercritical fluid extraction 1593
superoxide radicals 674
superphosphate fertilizer 829
supplements 1255, 1324
supply balance 475
support measures 1295
Supporting science 840, 1217
Surface 684
surface area 445, 1643
surface chemistry 1660
surface exchange 135
surface films 1607
surface irrigation 462, 1031
surface properties 1660
surface roughness 1643
Surface Runoff 24, 390, 521, 542, 684, 1615
surface seawater 134
surface-subsurface hydrological exchanges 801
surface water 19, 47, 164, 202, 340, 351, 434, 465, 484, 541, 544, 582, 640, 671, 682, 855, 924, 951, 995, 997, 1011, 1013, 1014, 1017, 1018, 1116, 1117, 1124, 1145, 1147, 1157, 1301, 1339, 1378, 1386, 1464, 1491, 1514, 1645, 1684, 1752
surface water contamination 421
Surface Water Hydrology 1150
surface water modeling 927
surface waters 480, 499
surfaces 246, 587
Surfactants 494
surficial characteristics 916
Surveying and remote sensing 1493
surveys 127, 154, 170, 514, 544, 816, 955, 1141, 1414, 1422, 1549, 1647
survival 221, 442, 560, 795, 941, 947, 1103, 1195, 1494, 1617, 1716, 1735
susceptibility 1063, 1304, 1643, 1717
suspended clay 1618

Subject Index

- Suspended particulate matter** 1670
- suspended sediments** 108, 166, 438, 1383
- Suspended sediments---United States** 245
- Suspended solids** 1670
- suspended solids: pollutant, toxin** 1476
- sustainability** 52, 60, 92, 105, 153, 212, 224, 266, 272, 277, 309, 333, 340, 356, 359, 365, 382, 393, 409, 414, 445, 451, 465, 484, 530, 551, 573, 579, 592, 593, 599, 612, 642, 653, 719, 730, 762, 785, 817, 830, 846, 856, 869, 882, 970, 975, 995, 1029, 1037, 1044, 1175, 1196, 1219, 1258, 1263, 1338, 1366, 1446, 1452, 1457, 1460, 1467, 1472, 1477, 1496, 1515, 1533, 1549, 1553, 1554, 1565, 1567, 1571, 1584, 1619, 1620, 1622, 1624, 1641, 1667, 1669, 1708, 1773, 1804, 1812
- sustainable agriculture** 295, 459, 1623, 1697
- Sustainable agriculture---Congresses** 572
- sustainable agriculture research and education** 1773
- sustainable development** 25, 53, 295, 320, 964, 1443, 1571, 1659
- sustainable land management** 1189
- sustainable management** 723
- sustainable management system** 1554
- sustainable use** 1443
- sustainable weed management** 908
- Swamp plants---United States---Identification** 1178
- Swamp tupelo** 234
- Swamps and Marshes** 1413
- Sweden** 369, 677
- Swimming pools** 635
- swine** 714, 1062
- Swine---Carcasses---Environmental aspects** 261
- Swine---Feeding and feeds** 362
- swine feeding operations** 1359
- swine housing** 1062
- Swine---Housing---Waste disposal--North Carolina** 360
- swine manure** 684, 714
- Swine---Manure---Environmental aspects** 362, 883
- swine manure: environmental contaminant** 446
- Swine---Manure---Handling** 883
- swine manure: odor control** 1384
- Swine---Manure---Saskatchewan** 889
- swine (Suidae): piglet** 1475
- symbionts** 784, 894
- symbiosis** 10, 589, 652, 894, 1303
- symptoms** 705, 1308, 1469
- synergism** 137
- synthetic amino acids: dietary supplementation** 1475
- system** 1764
- system scales** 794
- systems** 124, 619, 1367, 1369, 1532, 1628
- Tamarixia radiata (Hymenoptera): biological control agent** 235
- tandem mass spectrometry** 1152
- tap water** 321, 1514
- taruma mirim** 1267
- Tasmania** 1456
- taxes** 41
- Taxodium ascendens (Coniferopsida)** 234
- taxonomy** 166, 247, 1457, 1693
- Taylor Grazing Act** 807
- TCDD** 1373
- teaching** 813
- technical progress** 40, 188, 1199
- techniques** 168, 181, 326, 518, 558, 679, 938, 969, 977, 1266, 1281, 1382, 1492, 1511, 1533, 1543, 1556, 1572, 1631, 1681, 1693, 1711
- Techniques of planning** 492, 569, 1215, 1334, 1443
- technology** 13, 200, 287, 505, 679, 835, 882, 964, 1028, 1115, 1575
- technology transfer** 41, 551, 1463
- temperate climate** 134, 1002, 1666, 1725
- Temperate environments** 1633
- Temperate forests** 371, 517, 1306, 1492
- temperate grasslands** 11, 517
- temperate lakes** 1468
- temperate wetlands** 898
- temperate zone** 433, 1358, 1634
- temperate zones** 51, 72, 770, 796, 1366, 1389, 1492
- temperature** 49, 134, 180, 523, 947, 1172, 1240, 1264, 1476, 1591
- temperature dependency** 135
- temperature effect** 661
- temperature effects** 186
- temperature gradients** 916
- temporal** 1250
- temporal change** 307
- Temporal Distribution** 1379, 1510, 1581
- temporal heterogeneity** 1437
- temporal scales** 1723
- temporal sensitivity** 802
- temporal variability** 1507
- temporal variation** 36, 371, 441, 510, 599, 611, 627, 629, 867, 910, 1066, 1118, 1169, 1385, 1530, 1612, 1789
- temporal variations** 342
- Temporary ponds** 1635
- temporary wetlands** 520
- Teratogenesis** 1469
- teratogenicity** 1476
- Teratogens** 1469
- terbufos: insecticide, toxin, pollutant** 134
- terminal electron acceptors** 801
- terminology** 1567
- terphenyl: pollutant** 93
- terraces** 865
- terracing** 865
- terrain** 715
- Terrain analysis** 1377
- Terrapins** 1597
- terrestrial aquatic interactions** 1068
- terrestrial ecology** 669
- terrestrial ecosystem** 1725
- terrestrial ecosystems** 814
- terrestrial foodchain** 480
- terrestrial invertebrate (Invertebrata)** 553
- terrestrial sediments** 701
- terrestrial systems** 421
- terrestrial vegetation** 423
- test design parameters** 915
- Test organisms** 1516
- testing** 1497, 1626
- testosterone** 545
- tests** 1522
- Testudines** 1597, 1706
- tetracycline: antibacterial drug** 90
- tetracycline antibiotics** 1152
- tetracycline: antiinfective drug** 90
- Texas** 441, 768, 776, 1100, 1205, 1759
- Texas Institute for Applied Environmental Research** 1759
- TGA** 807
- theoretical profile shape** 916
- therapeutic and prophylactic techniques** 90
- thermal energy transfer** 701
- thermal pollution** 1259
- thermal regimes** 1618
- thermal weed control** 1009
- thermophilic campylobacters** 1072
- thin layer chromatography** 1289, 1290, 1291
- thinning** 1349
- thiolcarbamate pesticides: determination, extraction, pollutant** 1613
- three dimensional plant canopy distribution** 812
- threonine** 1475
- thysanoptera** 774
- tidal flushing** 166
- tile drainage** 947, 997, 1049
- tillage** 12, 24, 30, 31, 36, 42, 47, 64, 95, 116, 118, 212, 274, 279, 301, 318, 319, 341, 358, 371, 478, 558, 589, 642, 668, 671, 677, 686, 693, 695, 715, 758, 830, 851, 852, 855, 870, 885, 888, 894, 899, 911, 930, 987, 991, 997, 1088, 1192, 1194

- tillage (contd.)** 1219, 1245, 1264, 1304, 1318, 1366, 1389, 1410, 1494, 1519, 1569, 1570, 1587, 1624, 1627, 1641, 1642, 1643, 1770
tilth 642
timber 1808
time 365
Time dependent 1581
time management 1444
Tin (Organic compounds) 1403
tissues 961
titanium dioxide 1115
TLC 1289
TMDL 710
Tn5393: antibacterial drug 90
Tn5393: antiinfective drug 90
tolerance 391, 941, 1202, 1488, 1771
Tomato industry---United States 699
Tomatoes---Diseases and pests---Control---United States 699
tonoplast 1490
topmodel 1729
Topographic mapping 1377
topography 91, 246, 602, 603, 629, 715, 1250, 1492, 1766
Topography and morphology 184, 890
topsoil 1231, 1385, 1549
topsoil removal 1348
Toronto 1685
Tortoises 1597
total organic settling material 1356
total phosphorus 368
total suspended solids 1720
toxic materials: food chain entry, sedimentation, suspended clay adsorption 1618
toxic pfiesteria 714
toxicity 44, 108, 110, 123, 130, 137, 167, 168, 181, 188, 230, 394, 434, 435, 442, 481, 511, 533, 634, 662, 721, 730, 834, 919, 922, 961, 1090, 1091, 1113, 1121, 1128, 1132, 1169, 1183, 1201, 1371, 1387, 1397, 1403, 1469, 1482, 1522, 1579, 1648, 1650, 1653, 1700
Toxicity testing 137, 928, 1128, 1648, 1650, 1791
Toxicity testing---Methodology 586
Toxicity tests 137, 666, 1128, 1469, 1648
Toxicity tolerance 1343
toxicology 130, 167, 208, 411, 435, 448, 480, 662, 834, 928, 1122, 1123, 1187, 1397, 1469, 1575, 1650, 1651, 1732
Toxicology and health 130, 167, 511, 721, 1093, 1121, 1128, 1373, 1469, 1648, 1650
Toxicology & resistance 1648
toxins 6, 412, 452, 638, 730, 1296, 1512, 1658, 1732
Toxoplasma gondii 452
trace elements 44, 581, 917, 1488, 1653, 1720
tracers 558, 1688
trails 1656
trajectory simulations 916
trans 1,3 chloropropane 1658
transcription factors 941
transfer functions 696
transformation 188, 1578
Transgenic animals 1659
Transgenic Crop Plants 731
transgenic crops 479, 1673
transgenic plants 197, 377, 479, 599, 606, 730, 1168, 1175, 1341, 1447, 1512, 1576, 1659
transgenics 479
translocation 1591
transmission 1195
Transparency 1670
transpiration 782, 937, 1225, 1375, 1378, 1385, 1752
transplanters 1007
transplanting 1007, 1247
transport 165, 928, 965, 1226, 1532, 1764
transport processes 558, 618, 620, 726, 818, 924, 929, 1067, 1083, 1131, 1156, 1287, 1376, 1385, 1404, 1517, 1563, 1719, 1774
trapping 212, 700
travel 1315
treatment lagoons 1359
treatment sustainability 1536
tree fruits 563
tree harvesting methods 723
tree regeneration 694
tree (Spermatophyta) 552, 1251
Trees 10, 60, 157, 811, 1306, 1414, 1604, 1665, 1666, 1812
Trees---Diseases and pests---Control---Southern States 1111
Trees---Diseases and pests---Southern States 1111
trees (Spermatophyta) 1025
trees (Spermatophyta): seedling 694
Trees---West---United States---Identification 1701
trends 221, 224, 448, 465, 1199, 1668
triacylglycerol lipase 244
triazine 3, 4
triazine degradation products: pollutant 951
triazine pesticides: determination, extraction, pollutant 1613
triazines 1114
triazines: herbicide, pollutant 951
triazole pesticides: determination, pollutant, extraction 1613
trickle irrigation 888, 935, 1166, 1482, 1608
Triclopyr 542
triethylamine salt 1397
trifloxystrobin: environmental safety, fungicide, mode of action, risk, strobilurin, synthesis 1603
trifluralin 1658
trifluralin: herbicide, toxin, pollutant 134
Trifolium pratense (Leguminosae): forage crop 716
Triticum 275, 319, 407, 537, 677, 995, 1219
triticum aestivum 275, 407, 537, 612, 677, 1112, 1308, 1460, 1715, 1768
Triticum aestivum [wheat] (Gramineae): grain crop 716
Triticum spp. (Gramineae) 1768
trophic conditions 854, 1110
Trophic interactions 766
trophic level 1093
trophic level bioaccumulation 560
trophic levels 130, 438, 730
Trophic relationships 148
trophic state 1618
Trophic structure 222
Tropical environments 287
Tropical regions 287
tropical wetlands 898
tropics 1020
Trout 1403, 1411
Trout (Freshwater) 1403
TSS 1720
turbidity 438, 1360, 1383, 1670
turbulence 443, 1509
turbulent boundary layers 1509
turkeys 244, 692
turtles 1597, 1706
Type II error 1127
Typha glauca 770
typhlodromus pyri 741
U.S. Environmental Protection Agency (EPA) 1747, 1759
UK 170, 202, 206, 369, 717, 882, 1194, 1195, 1243, 1255, 1350, 1359, 1367, 1368, 1548, 1635, 1675, 1756
Ultimate disposal of wastes 34, 191, 542, 635, 1409, 1442, 1528
Ultisols 1519
Ultraviolet radiation 442
uncertainty 510, 597, 1446
uncomposted manure: application timing, soil incorporation 785
uncontrolled combustion 457
Underground Services and Water Use 939, 1226, 1734
uniformity coefficient 444
unifying conceptual framework 1431
United States 6, 25, 41, 43, 52, 54, 79, 80, 81, 86, 88, 91, 127, 176, 204, 273, 282, 319, 321, 322, 324, 333, 335, 342, 361, 369, 388, 407, 426, 514, 517, 537

Subject Index

- United States (contd.)** 539, 573, 575, 593, 607, 616, 673, 685, 690, 700, 740, 786, 788, 796, 800, 807, 816, 817, 825, 833, 849, 852, 878, 955, 961, 982, 997, 1038, 1041, 1046, 1049, 1073, 1074, 1077, 1087, 1112, 1135, 1141, 1147, 1161, 1164, 1174, 1192, 1200, 1219, 1223, 1235, 1264, 1276, 1300, 1306, 1312, 1314, 1351, 1388, 1394, 1396, 1405, 1411, 1422, 1427, 1429, 1436, 1445, 1480, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1518, 1520, 1566, 1579, 1581, 1590, 1597, 1600, 1616, 1627, 1638, 1640, 1665, 1671, 1674, 1681, 1682, 1689, 1691, 1700, 1732, 1734, 1743, 1747, 1752, 1759, 1791, 1815
- United States, Chesapeake Bay** 339
- United States, Delaware** 1034
- United States Dept of the Interior---
Geological Survey** 420
- United States Environmental
Protection Agency---**
Computer programs 1080
- United States, Florida** 1695
- United States, Florida, Everglades** 1159, 1782
- United States, Great Lakes** 1373
- United States, Illinois** 227
- United States, Mississippi River** 1581
- United States, Missouri** 1443
- United States, New Mexico, Rio
Grande River** 1215
- United States, North Carolina** 415
- United States, Oregon** 424
- United States, Southeast** 415
- United States, Washington** 424
- universal soil loss equation** 318, 519, 715, 1719
- unpopular habitat management** 1625
- unsaturated amides: insecticide,
natural product** 968
- upland areas** 768, 1404, 1480
- upland forests** 429
- Upland sandpiper** 424
- upland soils** 1652
- Upper St. Johns River Basin
Project** 1680
- upstream-downstream linkage** 1451
- uptake** 123, 589, 899, 953, 1482
- urban activity** 1439
- urban air quality** 597
- urban areas** 577, 796, 1081, 1141, 1457
- urban forestry** 1667
- urban land use** 389
- urban runoff** 1340
- Urban Stream Restoration** 1685
- urban trees** 7
- urbanization** 333, 389, 1270
- urea** 4, 72, 104, 899, 1563
- urease inhibitors** 1400
- ureases: insecticide** 1177
- urine** 72, 417, 534, 1416, 1737
- US geological survey's national
water quality assessment p**
1041
- USA** 29, 322, 682, 685, 833, 1314, 1445, 1634, 1638
- USDA** 80, 81, 1164, 1808
- USDA Forest Service** 1681
- use efficiency** 30, 445, 453, 540, 950, 991, 993, 997, 1060, 1247, 1336
- use value** 786
- user interface** 528
- uses** 203, 1800
- USGS** 1445
- Utah** 584, 1205, 1349
- utilization** 123, 124, 147, 835, 1154, 1163, 1204, 1255, 1362, 1628, 1683
- UV B irradiation** 701
- UV light** 1476
- vacuoles** 1490
- vadose zone** 1660
- validity** 138, 587
- vapor pressure** 135
- Variability** 512, 525, 1101, 1495
- variable source areas** 1729
- variance mean indices** 665
- vascular plants** 53, 55, 115, 116, 128, 177, 179, 234, 235, 253, 254, 257, 429, 463, 473, 502, 552, 613, 641, 643, 667, 669, 694, 701, 716, 724, 785, 823, 850, 908, 952, 1025, 1153, 1251, 1483, 1496, 1619, 1673, 1692, 1714, 1768
- vector** 691
- vegetables** 279, 563, 746, 762, 1002, 1007, 1063, 1245, 1417, 1614, 1710
- vegetated buffer zones** 1684
- vegetation** 215, 340, 344, 394, 400, 425, 507, 522, 565, 640, 658, 690, 757, 768, 770, 782, 936, 1094, 1100, 1159, 1195, 1227, 1276, 1312, 1323, 1378, 1431, 1480, 1491, 1527, 1675, 1684, 1720, 1721, 1724, 1726
- vegetation clearance** 1487
- Vegetation cover** 658, 1724
- vegetation dynamics: event driven** 1723
- vegetation establishment** 1176
- vegetation management** 395, 579, 1698, 1725
- Vegetation monitoring---United
States** 639
- Vegetation patterns** 565, 770, 1435
- vegetation restoration** 1347
- vegetation shifts** 449
- vegetation structure estimation** 812
- vegetation types** 400, 1039, 1089, 1172, 1357, 1427, 1430
- vegetation uptake** 989
- vegetative filter strips** 1278
- vehicles** 26, 1675
- vermicomposting** 648
- Vermont** 903
- vernal pool** 520
- Vertebrata** 1101
- vertebrate pests** 393
- vertebrates** 55, 88, 102, 104, 113, 146, 165, 166, 168, 204, 216, 219, 252, 303, 321, 376, 446, 463, 468, 504, 560, 630, 667, 701, 764, 783, 789, 803, 814, 823, 850, 863, 876, 881, 914, 948, 969, 983, 984, 1006, 1052, 1094, 1097, 1103, 1109, 1123, 1187, 1191, 1197, 1201, 1207, 1208, 1251, 1255, 1270, 1297, 1303, 1352, 1396, 1399, 1422, 1429, 1475, 1484, 1485, 1487, 1520, 1604, 1618, 1635, 1639, 1700, 1706, 1711, 1725, 1736, 1741, 1772, 1808
- Vertical Flow** 1398
- vesicular arbuscular mycorrhizas** 117, 1488
- veterinary drugs: detection,
environmental fate, extraction,
pharmaceutical, pollutant,
sediment content, sludge
content, soil content, soil
pollutant** 471
- veterinary products** 1198
- viability analysis** 512
- Viburnum plicatum
(Caprifoliaceae): ornamental
crop** 952
- vicia villosa** 1082
- Victoria** 627, 856
- Virginia** 441, 577
- virulence** 173, 1717
- viruses** 139, 347, 350, 351, 370, 376, 452, 635, 691, 697, 1107, 1173
- Viruses, Bacteria, Protists, Fungi
and Plants** 1510
- viruses (Viruses General)** 348
- viruses (Viruses): pathogen** 1107
- viruses (Viruses): pollution
indicator** 350
- viscosity** 66, 244
- Vision: pesticide, surfactant** 396
- Visual inspection** 1600
- visualization techniques** 665
- volatile aromatic compounds** 789
- volatile compounds** 1302, 1399, 1677
- volatile fatty acids** 847, 1728
- volatile organic compound:
pollutant** 93
- volatile organic compounds** 1384
- volatile organic sulfur compounds:
abatement, pollutants** 2

- volatilization** 72, 123, 147, 454, 534, 587, 652, 864, 869, 950, 990, 991, 993, 1000, 1011, 1120, 1229, 1240, 1400, 1563
- volume** 484
- Vulgaris I hull** 423
- Washington** 521, 537, 903, 1349
- waste** 457
- waste disposal** 13, 35, 83, 447, 486, 501, 827, 918, 1004, 1027, 1037, 1169, 1324, 1409, 1410, 1731
- Waste disposal in the ground---South Dakota** 826
- waste incineration** 1675
- waste lagoons** 884
- waste management** 13, 34, 80, 81, 85, 86, 191, 228, 292, 414, 447, 496, 497, 697, 831, 955, 1004, 1104, 1207, 1258, 1409, 1730
- waste management industry** 1364
- waste management method** 1364
- Waste Management (Sanitation)** 143, 513, 1364
- waste processing method** 1364
- Waste products as fertilizer** 790
- waste treatment** 1, 13, 33, 35, 83, 85, 158, 447, 697, 985, 1104, 1209, 1252, 1572, 1731
- waste treatment methods** 143, 513
- waste utilization** 32, 203, 228, 229, 252, 636, 648, 874, 955, 1020, 1208, 1297, 1572, 1699, 1736, 1815
- waste water** 321, 369, 428, 636, 1180, 1668, 1736, 1749, 1750, 1751
- waste water bacteria** 1152
- waste water pollution** 1466
- waste water treatment** 85, 1180, 1368, 1391, 1696, 1747, 1751
- wastes** 74, 142, 259, 534, 835, 1204, 1367, 1485, 1683, 1731
- wastewater** 347, 351, 625, 697, 1004, 1107, 1181
- wastewater collection** 636
- Wastewater Disposal** 435, 635, 636, 1528, 1581
- wastewater recycling** 783
- Wastewater renovation** 635
- wastewater treatment** 1, 2, 287, 292, 532, 635, 636, 674, 918, 920, 964, 972, 973, 1004, 1078, 1115, 1388, 1528, 1581, 1615, 1695, 1735
- Wastewater treatment processes** 292, 635, 697, 918, 972, 973, 1078, 1115, 1398, 1528, 1615, 1695, 1735
- wastewater usage** 781
- water** 134, 224, 343, 394, 722, 873, 909, 961, 1097, 1103, 1114, 1195, 1236, 1336, 1490, 1532, 1540, 1573, 1593, 1613, 1657, 1736, 1748, 1789
- water allocation** 569, 1734
- water analysis** 75, 372, 666, 942, 1314, 1646, 1732
- Water and plants** 770, 1414, 1461, 1510, 1724
- water availability** 15, 333, 475, 602, 870, 971, 1166, 1225, 1247, 1365
- water balance** 507, 1227, 1247, 1378
- water balance component restoration** 659
- Water birds** 1469
- Water birds---East---United States** 199
- Water birds---Ecology** 1777
- water bodies** 396
- Water borne diseases** 452
- water chemistry** 1618
- water clarity** 701
- Water column** 1418
- water column toxicity** 1476
- water column transparency** 1110
- water conservation** 15, 36, 300, 320, 803, 888, 1008, 1248, 1396, 1405, 1410, 1641, 1734
- Water conservation---West---United States** 1754
- water contamination** 350
- water content** 558, 937
- Water Control** 1630
- water currents** 924
- water cycles** 1307
- water deficit** 937
- Water Demand** 1361, 1734
- Water Depth** 112, 344
- Water disappearance** 1635
- water diversions** 1437
- water erosion** 15, 281, 436, 476, 508, 510, 537, 540, 926, 929, 940, 990, 1031, 1087, 1156, 1183, 1185, 1268, 1376, 1527, 1548, 1631, 1715, 1719, 1774, 1775
- water erosion prediction project** 1774
- water erosion prediction project model** 715
- water excretion** 1737
- water flow** 621, 711, 782, 933, 1096, 1185, 1223, 1310, 1351, 1368, 1643
- Water fluctuation** 234
- Water Harvesting** 888, 1753
- water holding capacity** 719, 1025, 1559
- Water Hyacinth** 1735
- Water in agriculture** 460, 871
- Water in soils** 1585, 1753
- water infiltration** 24
- water intake** 1737
- Water---Law and legislation---West U.S.** 1738
- Water levels** 1437, 1630
- water management** 36, 48, 79, 170, 222, 320, 431, 487, 688, 861, 897, 938, 1013, 1016, 1215, 1286, 1326, 1334, 1337, 1363, 1377, 1441, 1446, 1520, 1609, 1734, 1736, 1739, 1741, 1756, 1765
- water management options** 659
- water management: research foci** 1059
- water metabolism** 1737
- water movement** 276
- Water---Nitrogen content---Environmental aspects---Mexico, Gulf of** 420
- Water Nitrogen content---Middle West** 1299
- Water---Nitrogen content---United States** 957, 980, 1010, 1040
- Water Pesticide content---Measurement** 905
- Water---Pesticide content---United States** 1138
- Water---Phosphorus content** 718
- water policy** 222, 376, 807, 1307
- water pollution** 3, 4, 29, 30, 33, 35, 40, 42, 46, 47, 80, 82, 86, 93, 130, 137, 138, 139, 148, 188, 204, 206, 210, 219, 252, 295, 320, 321, 322, 326, 343, 347, 348, 364, 372, 376, 413, 418, 484, 486, 500, 502, 540, 541, 551, 582, 585, 602, 616, 728, 800, 827, 831, 861, 874, 914, 919, 929, 934, 947, 977, 997, 999, 1011, 1013, 1018, 1034, 1037, 1046, 1057, 1065, 1084, 1090, 1097, 1104, 1117, 1119, 1120, 1124, 1132, 1133, 1136, 1147, 1150, 1156, 1157, 1164, 1182, 1211, 1249, 1259, 1301, 1305, 1343, 1356, 1358, 1362, 1368, 1373, 1379, 1386, 1402, 1403, 1419, 1448, 1464, 1466, 1469, 1504, 1505, 1506, 1514, 1516, 1549, 1561, 1580, 1581, 1648, 1654, 1655, 1668, 1684, 1700, 1715, 1731, 1732, 1736, 1747, 1759
- Water---Pollution---California** 857
- Water pollution control** 160, 335, 344, 666, 918, 964, 1012, 1013, 1017, 1076, 1116, 1159, 1358, 1581, 1585, 1645, 1695
- Water Pollution Effects** 148, 247, 335, 434, 435, 442, 542, 635, 683, 799, 1090, 1133, 1150, 1249, 1403, 1418, 1469
- Water Pollution---Environmental aspects---Mexico, Gulf of** 420
- Water pollution measurements** 1600
- Water---Pollution---Middle Atlantic States** 1146

Subject Index

- Water Pollution: Monitoring, Control & Remediation** 344, 494, 1159, 1581, 1600, 1695
- Water pollution prevention** 918
- Water---Pollution---Research---North Dakota** 1260
- Water Pollution Sources** 337, 372, 390, 544, 1012, 1049, 1119, 1135, 1235, 1395, 1412, 1580, 1581
- Water---Pollution---Total daily maximum load** 1261
- Water---Pollution---Total maximum daily load** 1262
- Water Pollution Treatment** 186, 287, 1362, 1735
- Water---Pollution---United States** 129, 304, 373, 709, 859, 1010, 1142, 1143, 1144, 1148, 1329, 1582
- Water---Pollution---United States Point source identification---Computer programs** 1080
- water potential** 1166
- water preservation** 1250
- water purification** 321, 322, 1747, 1750, 1751
- Water---Purification---Microbial removal---Congresses** 1449
- Water---Purification---Riverbank filtration---Congresses** 1449
- water quality** 3, 4, 22, 43, 46, 47, 80, 81, 83, 91, 136, 138, 162, 164, 171, 181, 210, 236, 252, 277, 281, 295, 321, 322, 326, 327, 335, 340, 343, 344, 347, 348, 350, 364, 368, 376, 398, 421, 426, 436, 452, 474, 476, 485, 500, 503, 514, 518, 521, 566, 587, 602, 616, 618, 619, 620, 649, 666, 673, 682, 683, 684, 685, 688, 710, 711, 714, 736, 752, 764, 787, 792, 803, 817, 833, 838, 852, 860, 861, 874, 913, 920, 923, 934, 938, 942, 961, 969, 977, 978, 995, 997, 1005, 1014, 1018, 1041, 1046, 1063, 1076, 1104, 1109, 1124, 1129, 1150, 1157, 1161, 1164, 1179, 1185, 1235, 1278, 1288, 1298, 1305, 1314, 1340, 1369, 1377, 1405, 1409, 1412, 1424, 1427, 1446, 1464, 1478, 1479, 1491, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1513, 1520, 1535, 1538, 1560, 1581, 1633, 1646, 1668, 1670, 1680, 1685, 1700, 1712, 1715, 1720, 1727, 1729, 1732, 1736, 1740, 1741, 1743, 1764, 1785, 1787, 1789
- water quality analysis** 903, 1388, 1740
- Water quality biological assessment---United States** 586, 1069
- Water quality---Chesapeake Bay Watershed---Md and Va** 39
- water quality control** 160, 205, 287, 322, 335, 344, 378, 438, 492, 666, 696, 918, 921, 923, 936, 964, 988, 1012, 1034, 1076, 1117, 1124, 1159, 1358, 1362, 1419, 1464, 1516, 1585, 1615, 1645, 1670, 1695
- water quality criteria** 1720, 1740
- Water quality---Idaho** 626
- Water quality management** 97, 378, 777, 858, 1034, 1105, 1334, 1453
- Water quality management California** 1330
- Water quality management---Chesapeake Bay---Md and Va---Handbooks, manuals, etc** 233
- Water quality management---Chesapeake Bay Region---Md and Va** 232
- Water quality management---Chesapeake Bay Watershed---Md and Va** 564, 1428, 1745
- Water quality management---Congresses** 290
- Water quality management---Middle West** 1299
- Water quality management---Mississippi River---Watershed** 1742
- Water quality management---New York, NY** 1763
- Water quality management---North Carolina** 360
- Water quality management---United States** 304, 628, 777, 793, 859, 956, 1605
- Water quality management---United States---Computer programs** 1080
- Water quality management---United States---Methodology** 905
- Water quality---Middle West** 23
- Water quality---Mississippi River---Watershed** 1742
- Water quality (Natural waters)** 683, 934, 1090, 1412, 1670
- Water Quality Standards** 524, 666, 833, 903, 1670
- Water quality---Standards---United States** 956
- Water quality---United States** 245, 628, 980, 1265
- water recycling** 1749
- water regime changes: ecological consequences** 809
- water repellent soils** 1459, 1753
- water reservoirs** 1549
- Water Resource Uncertainties** 141
- water resources** 79, 92, 295, 320, 340, 389, 514, 562, 569, 602, 620, 768, 807, 852, 855, 938, 940, 1016, 1039, 1215, 1363
- water resources (contd.)** 1378, 1396, 1413, 1446, 1487, 1600, 1727, 1749, 1765
- Water Resources and Supplies** 222, 685, 1271, 1600, 1630
- Water resources development---Government policy---West U.S.** 1738
- Water resources development---United States** 962, 1408
- Water resources development---West---United States** 461
- water resources issues** 1307
- Water Resources Management** 1076, 1363, 1597, 1734
- water resources planning** 569
- water retention** 1346
- water reuse** 369, 635, 636, 871, 918, 1031, 1063, 1682, 1736, 1747, 1748, 1749, 1750, 1751
- water rights** 807, 1215
- Water rights---West U.S.** 1738
- water samples** 1601
- Water sampling** 349, 666, 833, 1646
- water scarcity: environmental impact, health impact** 781
- water shortage** 781
- water stress** 937
- Water supplies** 452, 1734
- water supply** 322, 503, 594, 736, 833, 1215, 1445, 1536, 1579, 1734
- Water supply---Government policy---West U.S.** 1738
- Water supply---Management** 966
- Water supply---New York, NY** 1763
- water systems** 1413
- water table** 246, 441, 657, 1427, 1609
- water tables** 694
- water taste** 854
- Water temperature** 598, 801, 1735
- water tension** 659
- water transfer** 1166
- Water Treatment** 128, 322, 452, 964, 1159, 1398, 1575, 1695
- Water treatment and distribution** 452
- water treatment facilities** 636
- Water---United States---Pesticide content** 1611
- Water---United States---Phosphorus content** 1040
- water uptake** 688, 935, 937, 1166, 1266, 1288
- Water Use** 92, 320, 484, 503, 522, 523, 562, 1247, 1264, 1334, 1410, 1414, 1682
- water use efficiency** 15, 36, 92, 443, 462, 465, 523, 870, 888, 1033, 1059, 1166, 1219, 1225, 1247, 1490, 1591, 1756
- water use efficiency: integrated catchment management** 707
- water vapor** 523

- Water & Wastewater Treatment** 287, 964
- Water wells** 1135
- water yield** 711
- waterbirds (Aves)** 1639
- waterborne disease statistics:**
 pathogen identification, underreporting 914
- waterborne diseases** 321, 351, 376, 969, 1097, 1259
- Waterborne infection** 1105
- waterfowl** 862
- Waterfowl---North America---**
 Breeding 308
- waterlogging** 476, 941
- waters** 605, 800
- watershed** 863, 1532, 1764
- watershed health** 102
- watershed hydrology** 1259
- watershed integrity** 943
- watershed management** 19, 84, 125, 356, 514, 577, 650, 799, 831, 854, 938, 978, 1061, 1259, 1334, 1377, 1396, 1411, 1443, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1759, 1760
- Watershed management---**
 Bibliography 1762
- Watershed management---**
 California---Congresses 1803
- Watershed management---**
 Government policy---West U.S. 1738
- Watershed management---**
 New York, NY 1763
- Watershed management---**
 United States 1256, 1408, 1582
- Watershed management---**
 United States---Computer programs 1080
- Watershed management---**
 United States---Congresses 1803
- Watershed protection** 273, 565, 1248, 1377, 1411, 1443, 1630
- watershed related properties** 1110
- watershed resilience** 1340
- watersheds** 19, 79, 91, 107, 210, 246, 301, 321, 356, 389, 438, 510, 526, 539, 541, 565, 602, 611, 640, 768, 818, 831, 923, 929, 933, 938, 965, 978, 1076, 1096, 1097, 1358, 1363, 1396, 1404, 1427, 1443, 1452, 1491, 1549, 1684, 1719, 1759, 1766, 1774
- Watersheds---Environmental aspects---United States** 1256
- Watersheds---Research---United States---Computer programs** 1080
- Watersheds---United States** 1408
- Watersheds---United States---**
 Congresses 1803
- waterways** 1386
- weak study designs** 1431
- weather** 565, 855, 938, 941, 948, 1642
- weather data** 92, 1576
- weather forecasting** 1576
- weather patterns** 1129
- weather related variations** 1296
- weed associations** 221, 1112
- weed biology** 358, 478, 693, 750, 1458, 1511
- weed control** 6, 14, 36, 60, 117, 128, 153, 163, 173, 197, 212, 221, 231, 256, 279, 281, 302, 309, 310, 358, 365, 391, 398, 593, 606, 609, 686, 693, 724, 749, 766, 769, 788, 888, 970, 1007, 1009, 1112, 1247, 1263, 1313, 1444, 1458, 1637, 1665, 1671, 1689, 1725, 1767, 1768, 1770, 1771
- weed eating insects** 197
- weed management: benefits, risks** 667
- weed management strategies** 1361
- weed (Tracheophyta)** 643
- weeding** 1349
- weeds** 6, 14, 49, 60, 94, 117, 153, 163, 173, 197, 231, 256, 358, 365, 391, 478, 479, 593, 606, 642, 686, 693, 749, 750, 758, 769, 810, 830, 970, 1200, 1245, 1263, 1458, 1511, 1576, 1637, 1671, 1767, 1768, 1769, 1770, 1771
- Weeds---Control** 698
- weeds (Tracheophyta)** 253, 669, 1619
- weeds (Tracheophyta): pest** 908
- Weeds---West---United States** 178
- Wellhead protection** 858
- Wellhead protection---United States** 859
- wells** 246, 969, 1135
- Wells---Abandonment---Economic aspects---Southern States** 822
- Wells---Abandonment---Southern States** 822
- West** 1046, 1223
- West Virginia** 577
- Western** 1579
- western Australia** 246
- Western States of USA** 44, 79, 388, 537, 539, 607, 849, 1092, 1396, 1422, 1429, 1566, 1616, 1682, 1752
- Western United States** 594
- Western USA** 429
- wet soils** 1439
- wetland** 396, 498, 860, 1170
- Wetland agriculture---United States** 126
- Wetland animals---Ecology** 1777
- wetland assessment** 392
- Wetland conservation** 97, 217, 270, 718, 956, 963, 1354, 1778, 1799
- Wetland conservation---Australia---**
 New South Wales 702
- Wetland conservation---**
 Congresses 1353
- Wetland conservation---**
 Government policy---United States 1797
- Wetland conservation---**
 Great Britain 660
- Wetland conservation---**
 Mathematical models 249
- Wetland conservation---**
 Prairie Pothole Region 1354
- Wetland conservation---**
 South Dakota 404
- Wetland conservation---**
 United States 304, 374, 610, 962, 1213, 1238, 1589, 1703, 1704, 1794
- Wetland conservation---**
 United States---Case studies 217
- Wetland conservation---**
 United States Decision making 103
- Wetland conservation---**
 United States---Planning 242
- Wetland conservation---**
 Wisconsin 374
- wetland creation** 392, 520
- Wetland ecology** 401, 656, 963, 1022, 1218, 1354, 1583, 1778, 1780, 1784, 1788, 1797, 1799
- Wetland ecology---**
 Congresses 1353
- Wetland ecology---**
 Environmental aspects---United States 126
- Wetland ecology---**
 Evaluation 793
- Wetland ecology** **Great Plains** 1801
- Wetland ecology---**
 North America 772
- Wetland ecology---**
 Prairie Pothole Region 1354
- Wetland ecology---**
 South Dakota 404
- Wetland ecology---**
 United States 161, 374, 578, 601, 628, 1213, 1779, 1794, 1795
- Wetland ecology---**
 United States---
 Management 583
- Wetland ecology---**
 Wisconsin 374
- wetland ecosystem function** 392
- wetland ecosystems** 179
- Wetland flora---United States** 1213
- wetland forest** 954
- Wetland forestry** 1022, 1583
- wetland habitats: encroachment** 667
- Wetland hydrology** 524
- Wetland landscape design---**
 Northeastern States 1783
- Wetland management---**
 North America 150

Subject Index

- Wetland management---United States** 793, 1605, 1713, 1795
wetland monitoring 520
wetland-no-net-loss policy 392
Wetland planting---Northeastern States 1783
Wetland planting---Southern States 1586
Wetland plants 59, 963, 1171, 1784
Wetland plants---East---United States---Identification 974
Wetland plants---Ecology---East---United States 974
Wetland plants---Ecology---North America 974
Wetland plants---Harvesting---United States 633
Wetland plants---North America---Identification 974
Wetland plants---Northeastern States 1783
Wetland plants---Planting---United States 633
Wetland plants---Propagation---United States 633
Wetland plants Southern states 1586
Wetland plants---Southern States---Identification 555
Wetland plants---Southern States---Pictorial works 555
Wetland plants---Transplanting---United States 633
Wetland plants---United States 633
Wetland plants---United States---Identification 1178
wetland preservation 392
Wetland Processes 1685
Wetland restoration 392, 1171
wetland restoration ecology 1250
Wetland restoration---North America 568
Wetland restoration---United States 126
wetland soils 600, 1084, 1652, 1793
wetlands 37, 44, 59, 88, 97, 101, 175, 217, 287, 292, 305, 324, 344, 399, 401, 412, 415, 426, 433, 441, 497, 522, 585, 588, 631, 649, 711, 712, 752, 767, 770, 796, 813, 816, 900, 903, 920, 928, 964, 972, 997, 1030, 1068, 1078, 1098, 1122, 1159, 1162, 1169, 1180, 1201, 1233, 1340, 1346, 1378, 1391, 1398, 1413, 1418, 1421, 1427, 1436, 1481, 1487, 1491, 1493, 1510, 1579, 1580, 1615, 1630, 1633, 1634, 1664, 1680, 1691, 1695, 1696, 1721, 1782, 1784, 1787, 1789, 1791, 1792, 1797, 1799, 1800, 1802
Wetlands---Australia---New South Wales---Management 702
Wetlands Classification 622, 656
Wetlands climate relationships 1413
wetlands conservation 1348
wetlands ecology 659
Wetlands---Environmental aspects 323
Wetlands---Great Britain 660
Wetlands Great Plains 1801
wetlands: habitat 1639
Wetlands---Hydrology---North Carolina 1222
Wetlands---Issues and policy 1786
Wetlands---Law and legislation---United States 622, 1799
Wetlands Management 128, 141, 1022, 1176, 1583
Wetlands management---United States 1705
Wetlands---North America 772
Wetlands---Northeastern States 708
wetlands protection 1625
Wetlands---Remote sensing 1776, 1780
Wetlands research 1413
wetlands restoration 1176
Wetlands---South Dakota 404
Wetlands---United States 101, 126, 355, 357, 374, 601, 633, 763, 962, 1178, 1420, 1589, 1779, 1794, 1795, 1796, 1798
Wetlands---United States---Classification 1213, 1798
Wetlands---United States---Management 103, 583
Wetlands---Wisconsin 374
wheat 275, 319, 407, 537, 677, 786, 810, 885, 1219, 1355
wheat fallow 7
White Clay Creek 1665
who 638, 961
wholesale prices 1197
wild animals 757, 815, 1711
wild birds 44, 174, 796, 1045, 1113, 1357, 1727
wild plants 479, 1332
wilderness 1352
wildfires 398, 408, 425
wildlife 6, 44, 50, 99, 120, 153, 188, 210, 340, 398, 484, 511, 565, 662, 711, 769, 821, 891, 964, 1379, 1403, 1469, 1515, 1597, 1708, 1711, 1809
wildlife borne diseases 1808
wildlife conservation 96, 207, 270, 395, 484, 796, 815, 862, 891, 1232, 1456, 1708
Wildlife conservation---Columbia River---Watershed 1489
Wildlife conservation---North America 772
Wildlife conservation---United States---Planning 242
wildlife damage management research 1808
Wildlife habitat 201
wildlife habitats 577, 767
wildlife human conflicts 1808
Wildlife management 207, 796, 815, 862, 1221, 1223, 1228, 1233, 1727
Wildlife management and recreation 1493
Wildlife management---West---United States 1280
wildlife manager perceptions 1808
Willet 1469
wind 579, 932, 1383, 1477, 1812
wind erosion 41, 281, 537, 926, 940, 1248, 1276, 1527, 1631, 1692, 1775, 1811, 1812
Wind erosion---Washington State---Columbia Plateau 1810
wind speed 92, 916, 1240
wind tunnel technique 1359
wind tunnels 353
windbreaks 52, 54, 127, 841, 1813
winter 677, 1642, 1715, 1814
winter cover crops 311
winter cover crops (Angiospermae) 1692
winter precipitation 659
winter wheat 238
Wisconsin 903
wolf reintroduction 1270
wood: accumulation, breakage, buoyancy, delivery, mobility, morphology, retention, size, storage 806
wood harvesting 449
wood wastes 1025
woodland 795
woodland river ecosystems 806
woodlands 395, 464, 658, 1045, 1243
woody plant cover 641
woody plants 333, 1171, 1378, 1394
woody plants (Spermatophyta): endangered species, threatened species 641
wool 1470
World 91, 222, 558, 604, 634, 1085
world markets 479, 1629
world population expansion 1177
Wyoming 1349
X 77: pesticide, surfactant, toxin 396
Xanthomonas campestris (Pseudomonadaceae) 90
Xenobiotics 113, 442
xenobiotics: biotransformations, degradation 336
xylem 937, 1591
Yeasts 697
yield 1714
yield increases 612
yield losses 117, 391, 679, 693, 1063, 1444, 1465, 1637, 1771

USDA Conservation Effects Assessment Project

yields 484, 505, 525, 677, 769, 965,
1642
young coniferous trees 423
zea mays 275, 319, 407, 523, 589,
852, 855, 885, 995, 1174, 1192,
1219, 1482, 1602, 1640
Zea mays (Gramineae) 257, 724

Zea mays [maize] (Gramineae):
grain crop, host 115
zenaida 1727
zinc 148, 418, 692
zones 205, 492, 936, 1117, 1278,
1510
zoning 1684

Zoobenthos 339, 565, 1461
zoogeography 891
zoology 787
Zooplankton 438, 1343
zooplankton (Animalia) 1618