Subject Index, *The Volunteer Monitor* newsletter (Issues indexed: Spring 1993 –Summer 2008)

Issues indexed:

| <u>Vol</u> | <u>Date</u> | Theme | Vol | <u>Date</u> | Theme |
|------------|-------------|--|------|-------------------|---|
| 5/1 | Spring 1993 | School-Based Monitoring | 12/2 | Fall 2000 | Monitoring Flora |
| 5/2 | Fall 1993 | Staying Afloat Financially | 13/1 | Spring 2001 | Clean Water Act |
| 6/1 | Spring 1994 | Volunteer Monitoring: Past, Present & Future | 14/1 | Winter 2002 | Monitoring Beaches & Reefs |
| 6/2 | Fall 1994 | Monitoring a Watershed | 14/2 | Summer 2002 | Success Stories |
| 7/1 | Spring 1995 | Managing and Presenting Your Data | 15/1 | Winter 2003 | University Partnerships |
| 7/2 | Fall 1995 | Monitoring Urban Watersheds | 15/2 | Summer 2003 | Focus on Fish |
| 8/1 | Spring 1996 | Managing a Volunteer Monitoring Program | 16/1 | Winter 2004 | Agency Partnerships |
| 8/2 | Fall 1996 | The Wide World of Monitoring | 16/2 | Summer 2004 | Business, School & Community Partnerships |
| 9/1 | Spring 1997 | Methods and Techniques | 17/1 | Winter 2005 | Data Documentation & Interpretation |
| 9/2 | Fall 1997 | Community Outreach | 17/2 | Summer 2005 | Macroinvertebrate Monitoring |
| 10/1 | Spring 1998 | Monitoring Wetlands | 18/1 | Winter 2006 | Bacteria Monitoring |
| 10/2 | Fall 1998 | Monitoring Estuaries | 18/2 | Fall 2006 | Observational Monitoring |
| 11/1 | Spring 1999 | Restoration | [N | o issues publishe | ed in 2007] |
| 11/2 | Fall 1999 | Youth Projects | 19/1 | Summer 2008 | Doing Science, Taking Action |
| 12/1 | Spring 2000 | Monitoring Fauna | | | |

Beach Watch (animal surveys), 8/2, 17

303(d) list, 13/1, 6; see also Data use 305(b) report, 6/1, 13; 13/1, 4, 16; see also Data use Acid rain monitoring, ALLARM, 15/1, 3 Action taking, see Data use Adopting river sites, 16/2, 1 Air monitoring, 8/2, 18 Algae blooms, Rhode Island ponds, 14/2, 16 periphyton monitoring, 12/2, 24 see also Chlorophyll; Toxic phytoplankton Amphibians Great Herp Search (MD), 12/1, 1 Frogwatch USA, 11/1, 24 NAAMP, 10/1, 21 Aquatic vegetation, 12/2 (whole issue) benefits vs. nuisance, 12/2, 1 monitoring equipment, 12/2, 9 survey methods, lake, 12/2, 1 wetland plant survey (MA) 12/2, 14 why monitor, 12/2, 6 see also Submerged aquatic vegetation; Invasive species Bacteria monitoring, 18/1, whole issue beaches (Surfriders), 18/1, 24 CAFOs, 18/1, 19 Coliscan (letter to editor), 18/2, 2 frequently asked questions, 10/2, 13 human health surveys and, 8/2, 1 in Little Bay, Texas, 18/1, 22 incubators, see Homemade equipment indicators, 10/2, 8; 18/1, 8 internationally, 18/1, 20 membrane filtration, 10/2, 9, 11; 18/1, 8 methods comparison study, 18/1, 1 methods overview, 10/2, 8; 18/1, 8 MI method (letter to editor), 19/1, 2 optical brightener monitoring, 11/2, 21; 15/2, 16 pet waste study (kids), 18/1, 13 sanitary surveys, 6/2, 20; 10/2, 10 simplified methods, 8/2, 3; 10/2, 11; 18/1, 8 source tracking, 9/2, 18; 18/1, 14, 16, 18 validation study, Oregon, 18/1, 7 see also Data use Beach debris monitoring International Coastal Cleanup, 18/2, 14 National Marine Debris Monitoring Program, 8/2, 21; 18/2, 14 Beach profiling, 14/1, 3, 7

Beached bird surveys, 14/1, 10 Bioassays Assessing Toxic Risk (curriculum), 15/1, 12 duckweed assay, 8/2, 22 in the classroom, 5/1, 9; 11/2, 1 lettuce seed assay, 8/1, 18; 8/2, 2 Bioassessment, see Macroinvertebrate monitoring Biomonitoring, see Macroinvertebrate monitoring Bird surveys beached birds, 14/1, 10 bird banding, 8/2, 9 bird use of restored sites, 12/1, 18 BMP monitoring, see Management practices Boating impacts, 15/1, 22 levels, monitoring, 18/2, 1 CAFOs, E. coli monitoring, 18/1, 19 Certifying volunteers, 17/1, 6 Chlorophyll air-dryer for samples, 12/2, 22 filtration, 12/2, 18 measuring in Rhode island ponds, 14/2, 16 methods, overview, 12/2, 16 spectrophotometry vs. fluorometry, 12/2, 19 Citizen Science conference, 19/1, 1 Clam flat monitoring Friends of Medomak (ME), 16/1, 1 ME DMR volunteer program, 14/2, 14 Clarity, see Transparency Clarity tube, see Transparency tube Clean Water Act, 13/1 (whole issue) resource list, 13/1, 9 see also 303(d), 305(b), TMDL Communication crafting your message, 9/2, 7 language, effective, 9/2, 3 writing for the public, 13/1, 29 see also Community outreach; Media Community organizing, 9/2, 12 Community outreach, 9/2 (whole issue) documenting effectiveness, 7/2, 12 festivals and events, 9/2, 4, 5; 17/1, 17 monitoring demonstration at, 11/2, 14 moving people to action, 9/2, 1 working with tribes (AK), 9/2, 8 see also Communication; Media Community science, 15/2, 2

Comparison, volunteer vs. professional, see Validating volunteer data Conductivity, 9/1, 13; 14/1, 20 Conferences, see Citizen Science conference, National monitoring conferences Construction site monitoring, 18/2, 6 Cooperative Extension, 5/2, 18; 15/1, 18 C-SAW (Consortium for Scientific Assistance to Watersheds), 19/1, 12 CSREES, see Cooperative Extension Data documentation, 17/1, 1, 8 Data elements, 17/1, 1 Data interpretation, 7/1, 22 data analysis workshops (ALLARM), 17/1, 11 data screening, common sense, 7/1, 4 Data management, 7/1 (whole issue) designing data management system, 7/1, 6 Data presentation Data to Information (manual), 10/2, 15 displaying Secchi data, 6/2, 24 examples, 7/1, 20; 12/1, 22 graphs, 7/1, 18 Ready, Set, Present! (manual), 12/1, 22 DATA USE 303(d) and TMDL, 13/1, 20, 22, 24, 32; 14/2, 22; 17/2, 7, 13; 19/1, 20 305(b) report, 13/1, 16; 16/1, 14; 17/2, 9 bacteria 303(d) listing, 13/1, 20; 17/2, 7; 19/1, 20 Alabama success stories, 12/1, 24 Baltimore sewers, 14/2, 7 Iowa legislation (Clear Creek), 19/1, 18 Maine clam flats, 14/2, 14 results in newspaper (Mad River), 6/1, 17 TMDL, 13/1, 22, 32; 14/2, 22; 18/1, 6 beached birds, 14/1, 10 chlorophyll (RI ponds), 14/2, 16 classification upgrade ("Outstanding Alabama Water"), 19/1, 16 construction site BMP monitoring, 18/2, 6 Florida LAKEWATCH, 14/2, 18 gill net bycatch, 14/1, 10 horseshoe crab counts, 18/2, 22 invasive species detection and mapping, 12/2, 13 (milfoil); 19/1, 21 (crabs) macroinvertebrates, 14/2, 28; 17/2, 9, 12, 18 multiple data use examples, 6/1, 11 NH Lakes Lay Monitoring Program, 14/2, 6

oil spill damage, 14/1, 11; 18/2, 11 phosphorus from lawn fertilizers, 7/2, 10 in NH lake, 14/2, 4 water quality standards (VT), 6/1, 18; 14/2, 31 plant survey, 12/2, 7 SAV mapping, 10/2, 16 science journal articles, 19/1, 8 Secchi depth 305(b) report, 16/1, 14 dredging impacts, 14/2, 12 long-term trends, 14/2, 27 stream walk data used in restoration, 18/2, 16 temperature (thermal discharge), 14/2, 8 transparency tube, 14/2, 21 vegetation survey, 12/2, 7 wastewater treatment (San Marcos River), 13/1, 10 water quality standards phosphorus (VT), 14/2, 31 Scenic Rivers (MO), 13/1, 15 Democratization of science, 19/1, 1 Designated uses, 13/1, 2, 18 Directory, volunteer monitoring programs, 10/2, 20 Discharge monitoring heated water, 14/2, 8 paper mill effluent, 14/2, 10 Dissolved oxygen testing standard solution, making, 9/1, 8 test kits, 9/1, 6 E. coli, see Bacteria monitoring Emergency response (oil spill), 18/2, 11 Enzyme immunoassay (EIA) test kits, 7/2, 19 Epidemiology surveys, 8/2, 1, 5 Estuary monitoring, 10/2 (whole issue) challenges, 6/2, 15 compared to river monitoring, 10/2, 1 in Alaska, 9/2, 8; 10/2, 18 NEP, NERR, 10/2, 22 methods overview, 10/2, 1 resource list, 10/2, 15 Financial support, 8/1, 20 site "adoption," 16/2, 5 see also Fundraising; Partnering First flush, see Storm event monitoring Fish counts, 15/2, 8, 9 Great American Fish Count, 11/1, 24 Fish seining, 15/2, 6 Fish tagging, 15/2, 1 Fishing effort, monitoring, 18/2, 1 FishWatch (Copper River watershed), 18/2, 1 Floating classroom, 15/1, 10 Flow, see Stream physical characteristics Forest monitoring (IL), 12/2, 21 Freezing water samples, 15/1, 11 Funding cuts, surviving, 8/1, 20 Fundraising, 5/2 (whole issue) general principles, 5/2, 1 phone-a-thons, 5/2, 4 program budget, 5/2, 3 proposal writing, 5/2, 9, 12 Geographic information systems (GIS), 7/1, 10 GLOBE program, 11/2, 1 Gravelometer, 17/1, 20 GREEN low-cost monitoring kit, 10/2, 20 Groundwater monitoring, 6/2, 10 well testing, nitrates, 6/2, 13 Habitat monitoring, 6/2, 1 Harmful algal blooms, see Toxic phytoplankton History of volunteer monitoring, 6/1, 14 HOMEMADE EQUIPMENT air-dryer, chlorophyll samples, 12/2, 22 automatic flow-through sampler, 9/2, 21 beach profiling equipment, 14/1, 3, 5 bottle trap for macroinvertebrates, 10/1, 14 "bug rack," 12/1, 11

extendable sample collection rod, 16/1, 3 incubators, 5/1, 15; 6/1, 3; 6/2, 2; 10/2, 12, 14 integrated sample collectors, 12/2, 17 optical brightener trap, 15/2, 16 photometer, fiber optic, 8/1, 19 plant sampling rake, 12/2, 9 pole for depth sampling, 10/2, 3 Secchi disk, 16/1, 20 Secchi line reel, 6/2, 23 shallow water sampler, 9/2, 22 sieves (macroinvertebrate monitoring), 17/2, 17 staff gauge/crest gauge, 7/2, 18; 15/2, 21 storm event siphon sampler, 16/2, 2 "stream sentinel" for toxicity testing, 7/2, 20; 9/1, 2temperature profile tool, 6/2, 23 transparency tube, 6/2, 22; 16/1, 21; 16/2, 2, 4 viewscope, 12/2, 9 water sampler, Van Dorn, 6/2, 23 wire weight gauge, 15/2, 22 Horseshoe crab count, 18/2, 22 Human use monitoring, 18/2, 1 Hydrometer, 9/1, 13; 14/1, 20 In-kind support, see Partnering Integrated sample collection, 12/2, 17 International monitoring projects Global Water Watch, 18/1, 20 Rio Grande, human health, 8/2, 1 Water Watch (AL, Philippines), 15/1, 14 Intertidal surveys plants and invertebrates (WA), 14/1, 7 tide pools (MA), 14/1, 9 Invasive species crabs, northeastern US, 19/1, 21 curriculum, Invasion Ecology, 15/1, 12 detection, 14/2, 26 monitoring programs, overview, 12/2, 10 Spartina Watch (WA), 10/2, 19 utility to wildlife, 15/2, 14 Weed Watchers (NH), 12/2, 12 zebra mussels, 5/1, 14 Land use surveys, 6/2, 19 Liability insurance, 8/1, 22 Lichens as bioindicators (letter to editor), 12/2, 2 Macroinvertebrate monitoring, 17/2 (whole issue) agency methods, variability in, 17/2, 22 and having fun (UMMP), 17/2, 4 "catch and release" techniques, 17/2, 14 fun facts, 12/1, 10 habitat monitoring, 6/2, 1 IWLA method revisions, 15/2, 7 keeping bugs alive for study, 13/1, 27 leaf packs, 17/2, 16 low-cost scopes, 9/1, 4 methods overview, 12/1, 13; 17/2, 1 metrics, 17/2, 6 Most Wanted list, 9/1, 1; 17/2, 9 resource list, 9/1, 5; 12/1, 12; 17/2, 20 rock baskets, 16/2, 6 VA SOS modified method, 15/1, 6 viewing cell, 8/2, 23 winter stoneflies, 7/2, 14 with students, 9/1, 1 see also Manuals and field guides; Wetland monitoring Management practices, monitoring bird use of restored sites, 12/1, 18 construction site BMPs, 18/2, 6 marine protected zones, 14/1, 18 stream restoration, 11/1, 10 MANUALS & FIELD GUIDES aquatic vegetation field guides, 12/2, 5 Clean Water (estuary monitoring), 10/2, 15 EPA manuals Volunteer Estuary Monitoring (2nd ed.)

12/1, 22Volunteer Stream Monitoring, 9/2, 24; 17/2, 20 IWLA SOS teacher's manual, 11/2, 24 macroinvertebrate monitoring IWLA field guide, 15/2, 7 Living Waters (River Network), 12/1, 12 RBP manual, EPA, revised, 12/1, 16 resource listing, 17/2, 20 Voshell, Reese, field guide, 14/2, 24 wetlands, 13/1, 31; 16/2, 24 restoration monitoring, 16/1, 22 Streamkeeper's Field Guide, 12/1, 12 wetland monitoring macroinvertebrates (MN), 16/2, 24 Hicks, Anna, biomonitoring, 13/1, 31 IWLA SOS handbook 10/1, 26 Marine debris monitoring, 8/2, 21 Marine sanctuaries, 14/1, 18 Media, working with, 5/1, 10; 9/2, 16 "Strategies for Cheapskates," 9/2, 14 see also Communication Mercury monitoring, 8/2, 5 Metadata, 17/1, 1 Microbial source tracking limitations, 18/1, 17 methods overview, 18/1, 16 ribotyping (Maine), 18/1, 14 see also Bacteria monitoring MONITORING METHODS (in-depth articles) bacteria, 10/2, 8, 10; 18/1, 8 beach profiling, 14/1, 3 bioassays duckweed, 8/2, 22 lettuce seed, 8/1, 18; 8/2, 2 chlorophyll, 12/2, 16 dissolved oxygen test kits, 9/1, 6 invasive aquatic plants, 12/2, 12 lake vegetation surveys, 12/2, 6 macroinvertebrates catch-and-release method, 17/2, 14 methods overview, 12/1, 13; 17/2, 1 Family-level ID (Friends of Deer Creek), 17/2, 12 Huron River Watershed Council, 17/2, 11; 19/1, 14 "Most Wanted" list (CT DEP), 17/2, 9 VA SOS, 15/1, 6 optical brighteners, 11/2, 21; 15/2, 16 phosphorus, 6/1, 19 toxic phytoplankton, 10/2, 4; 12/1, 20 streamflow, 15/2, 18 water clarity (transparency, turbidity), 16/1, 17 National monitoring conferences National Water Quality Monitoring Council (NWQMC): 2004, 16/2, 19; 2006, 18/2, 5; 2008, 19/1, 24 Volunteer monitoring: 4th (1994), 6/1, 24; 5th (1996), 8/2, 24; 6th (2000), 12/1, 3 National volunteer monitoring association (proposed) 5/1, 24 National Water Monitoring Day, see World Water Monitoring Day Observational monitoring, 18/2 (whole issue) construction site BMPs, 18/2, 6 QA plans (QAPPs) for, 18/2, 19 stream walk (CT), 18/2, 16, 18 windshield surveys, 6/2, 19 Oil spill response Delaware Riverkeeper, 18/2, 11 Beach Watch (CA), 14/1, 11 Optical brightener monitoring, 11/2, 21; 15/2, 16 Organic pollutants, enzyme immunoassay test kits, 7/2, 19 Organizational development, stages of, 8/1, 14

Outreach, see Community outreach Parallel testing, see Validating volunteer data Partnering C-SAW (Consortium for Scientific Assistance to Watersheds) (PA), 19/1, 12 with agencies, 16/1 (whole issue) with corporations, 5/2, 20; 16/2, 16; 18/2, 14 with local businesses, 16/2, 1 with schools, 5/1, 22; 16/2, 13, 14 teacher training, 16/2, 12 tips for success, 5/1, 3 using school lab, 16/2, 5 with tribes in Alaska, 9/2, 8 in Massachusetts, 8/2, 5 with universities, 15/1 (whole issue) benefits, 15/1, 5 Cooperative Extension programs, 15/1, 18 participatory research, 15/1, 22 Partnerships, informal (TX), 16/1, 8 Partnerships, local, 16/2, 1, 8, 12, 14 Pebble counts, 8/2, 15; 17/1, 20 Periphyton, see algae Phosphorus methods, 6/1, 19 Presentation, see Data presentation Program structure models continuum (Candie Wilderman), 15/1, 1 top-down vs. bottom-up, 19/1, 1 Public outreach, see Community outreach Quality assurance data screening, 7/1, 4 documenting, 17/1, 1 EPA QAPP guidance document, 14/2, 3 of bird banding data, 8/2, 9 of student-collected data, 5/1, 16 QA plan for observational monitoring, 18/2, 19 tiered approach, 16/1, 1 see also Validating volunteer data Random sampling, IL RiverWatch, 16/1, 10 Reef monitoring RECON (Ocean Conservancy), 14/1, 14 REEF, 8/2, 18; 14/1, 17 Reef Check, 14/1, 17 Sea Stewards (Florida Keys), 14/1, 18 Refractometer, 14/1, 20 Reptiles Great Herp Search (MD), 12/1, 1 sea turtle monitoring, 8/2, 20; 15/2, 11 turtle monitoring (wetlands), 10/1, 20 Restoration, 11/1 (whole issue) coastal dunes, 11/2, 14 ecological approach, 11/1, 1 funding, 11/1, 13 monitoring, post-project bird use, 12/1, 18 restored stream sites, 11/1, 10 permits and (Clover Creek), 7/2, 15 resource list, 11/1, 20 salt marsh, 10/1, 9; 11/1, 5 SAV planting, 11/1, 16 stream bioengineering, 11/1, 7 vegetated streamside buffers, 18/2, 16 Youth Corps, 11/2, 16 River of Words, 17/1, 18 Salinity hydrometer reading conversions, 5/1, 18 methods comparisons, 9/1, 13; 14/1, 20; 17/1, 21 methods, overview, 5/1, 20 Site location, documenting, 17/1, 8 Sanitary surveys, 6/2, 20; 10/2, 10 School-based monitoring action taking, 5/1, 8 aerial photos, 6/2, 17; 11/2, 11 bioassays, 11/2, 1 computer networking, 5/1, 12

Cornell Univ. curricula, 15/1, 12 Earth Force, 11/2, 7; 16/2, 16 GLOBE, 11/2, 1 GREEN, 5/1, 17 interdisciplinary projects, 5/1, 6 IWLA SOS teacher's manual, 11/2, 24 quality control of data, 5/1, 16 restoration and science teaching, 11/1, 22 student congresses, 5/1, 18 teacher training, 16/2, 12 toxicity testing, 5/1, 9 urban creek monitoring (CA), 7/2, 11 using data in classroom, 7/1, 3 zebra mussel monitoring, 5/1, 14 see also Partnering (with schools); Youthoriented projects Science journals, volunteer data in, 12/1, 21; 19/1.8 tips for getting published, 19/1, 8 Sea turtle monitoring, 8/2, 20; 15/2, 11 Secchi disk compared to turbidity and TSS, 16/1, 17 homemade, 16/1, 20 horizontal black, 16/2, 2, 3 line stretching/shrinking, 9/2, 23; 16/1, 20 Secchi Dip-In, 15/1, 9: 16/1, 16 Side-by-side comparisons, see Validating volunteer data Siphon sampler, see Storm event sampling "Snapshot" monitoring events Earth Day (TX LCRA), 11/2, 19 Water Snapshot (Delaware River basin), 9/2, 10 see also World Water Monitoring Day Social scientist's perspective, 15/2, 2 Spanish-language materials, 7/2, 22; 17/1, 24 Starting a monitoring program, 8/1, 6 stages of development, 8/1, 14 Statistics basic descriptive, 7/1, 14 for analysis of validation studies, 9/1, 19 pH values and, 7/2, 17 STORET, 17/1, 15 Storm drain stenciling, 7/2, 8 Storm event monitoring Russian River First Flush, 16/2, 8 sampler, siphon, 16/2, 11 Stormwater Team (construction site monitoring), 18/2, 6Strategic planning, 8/1, 16 Stream models Carry Creek, 9/2, 17 water tower, 10/2, 20 Stream physical characteristics channel morphology, 8/2, 12 flow case study (MI), 16/1, 2 float method, 15/2, 20 head rod method, 16/1, 3 methods overview, 15/2, 18 height (stage) staff gauge/crest gauge, 15/2, 21 wire weight gauge, 15/2, 22 pebble counts, 8/2, 15; 17/1, 20 Students, see School-based monitoring Submerged aquatic vegetation (SAV) mapping, 10/2, 17 restoration, 11/1, 16 SAV Hunt, Chesapeake Bay, 10/2, 16 Success stories, 14/2 (whole issue) "Outstanding Alabama Water," 19/1, 16 septic tank legislation, IA (Clear Creek), 19/1, 20 see also Data use Surveys, US volunteer monitoring programs 1993 results, 5/2, 22; 6/1, 4, 6, 11 1998 results, 10/1, 30

Sustainability monitoring, 8/2, 21 Teacher training, 16/2, 12 Temperature monitoring mercury thermometer hazards, 12/1, 2 trout stream (MA), 14/2, 8 Test kits chemical wastes, disposal, 9/1, 10, 11 dissolved oxygen, 9/1, 6, 7 enzyme immunoassay (EIA), 7/2, 19 nutrients, 9/1, 12 reagent degradation, preventing, 9/1, 9 salinity, 5/1, 21; 17/1, 21 Tiered approach to data use, 16/1, 1 TMDL process, 13/1, 7 elements of TMDL, 13/1, 26 see also Data use Total suspended solids (TSS), 16/1, 17 Toxic phytoplankton Delaware program, 15/1, 17 methods update (ME), 12/1, 20 monitoring, overview, 10/2, 4 resource list, 10/2, 7 Toxicity testing "stream sentinel," 9/1, 2 see also Bioassays Transparency compared to turbidity and TSS, 16/1, 17 vertical vs. horizontal methods, 16/2, 2 see also Secchi disk, Transparency tube Transparency tube Australian "turbidity tube," 6/2, 22; 16/1, 21 comparison study, horizontal vs. vertical 18/2, 20 design variations, 16/1, 21; 18/2, 21 horizontal, New Zealand, 16/2, 2 vertical with movable target, 16/2, 4 Turbidity, 16/1, 17 Urban watersheds, monitoring, 7/2 (whole issue) urban NPS monitoring (Urban Watch), 7/2, 4 urbanization and water quality, 7/2, 6 User perception surveys, NY lakes, 13/1, 12 Use of data, see Data use Validating volunteer data, 9/1, 16 bacteria data, 18/1, 7 chemical testing, 9/1, 16 crab identification (Delaney et al.), 19/1, 21 lake monitoring, 9/1, 17 Florida LAKEWATCH, 15/1, 11 macroinvertebrate data IL. CT. 9/1. 18 WA (Paulsen & Fore), 12/1, 1 MD Stream Waders, 17/2, 18 VA SOS (Engel & Voshell), 15/1, 6 statistical analysis, 9/1, 1 transparency tubes, 16/1, 18 validation studies published in science journals, 19/1.11 Vernal pools, certifying, 10/1, 22 Viewscope for aquatic plant surveys, 12/2, 1, 9 for Secchi disk reading, 16/1, 19 Volunteer monitor "job description," 8/1, 11 Volunteer monitoring in US history, 6/1, 14 nat'l survey results, 5/2, 22; 6/1, 4, 6, 11; 10/1, 30 Volunteer research symposium, 19/1, 1 Volunteers, managing developing leadership, 8/1, 12 preventing attrition, 8/1, 4, 5, 13 thanking (23 ways), 8/1, 1 Watershed, delineating, 6/2, 3 Watershed festivals, see Community outreach Watershed models, homemade large-scale, 11/2, 8 "Watershed in a Box," 9/1, 20 see also Stream models

Watershed surveys, 6/2, 19 Wetland monitoring, 10/1 (whole issue) Adopt a Beach protocols, 8/2, 7 bioassessment indicators, selecting, 10/1, 19 macroinvertebrates, 10/1, 14, 15 plants, 10/1, 14 functional assessment, 10/1, 17, 25 methods overview, 10/1, 17 programs, overview, 10/1, 8 resource listing, 10/1, 26 tidal marshes (ME), 10/1, 25 vernal pools, 10/1, 22 see also Manuals and field guides Wetlands introduction to, 10/1, 3 mitigation, 10/1, 6 regulation, 10/1, 7 restoration, salt marsh, 10/1, 9; 11/1, 5 Wildlife surveys Beach Watch (animal surveys), 8/2, 17 Great Herp Search (MD), 12/1, 1 Keeping Track (carnivores), 12/1, 8 NatureMapping Program, 12/1, 17 see also Amphibians; Bird surveys; Reptiles World Water Monitoring Day, 15/1, 21; 15/2, 3; 16/1,7 Youth-oriented projects, 11/2 (whole issue) 4-H, 11/2, 10 culvert assessment, National Forest, 11/2, 12 Earth Force, 11/2, 7; 16/2, 16 Fish planting, 8/1, 21 GLOBE, 11/2, 1 Youth Corps, 11/2, 16 see also School-based monitoring