INDEX

A amphibians, conservation practices &, 273, 275–276, 278–279	carnivores conservation practices &, 265–268, 276, 278; livestock &, 265–268
arthropods, fire &, 87 atmosphere fire &, 92–93; woody plant encroachment &, 115–116, 146	conservation effects assessment project goals of, 1–2 overview of, 3–4 practices evaluated &, 5–6 rangelands &, 4–5
B biodiversity economic value of, 407; woody plant encroachment &, 117–118, 127–128, 148	climate brush management &, 137; carbon sequestration &, 46; fire &, 99–100; range planting &, 175–176, 181–183, 186–188; woody plant encroachment &, 116–117
brush management assessment of, 107–170; economics of, 387–392, 403; ground water recharge &, 133–135 history of, 118–120; knowledge gaps of, 146–148 livestock &, 129–131; planning of, 120–122; recommendations on, 145–146; soils &, 111–115, 123–125 treatment longevity of, 143–145 wildlife &, 136–145	cultivation, range planting &, 177–178 current status of knowledge summary of, 12–19 knowledge gaps of, 19–20 D defoliation, 28, 31–32, 47–49 drought, grazing &, 26–27 E
burning brush management &, 145, 148; conservation practices &, 77–104; economics of, 392–394, 403–404; knowledge gaps of, 99 riparian management &, 225–226, 240; recommendations for, 98–99 smoke management &, 92–93 weed control &, 300–301, 305	economic value, conservation practices &, 129–131, 373–422 ecosystem services, value of, 228–229, 377–382, 403–409 ecological site, definition of, 354, 359–360
carbon sequestration fire &, 90–92; grazing &, 46–47; range planting &, 185; riparian management &, 236–237; woody plant encroachment &, 111, 114, 124–127	erosion brush management &, 131–136, 149; control of, 309–310; fire &, 87, 97–98; grazing &, 33–34; range planting &, 184; riparian systems &, 233 woody plant encroachment &, 111, 114

F	systems of, 26, 29, 32, 42, 52
fencing	wildlife &, 256–259, 268–273; woody plant encroachment &, 109
livestock &, 45, 49, 58;	woody plain encroachment a, 107
riparian areas &, 217	Н
fire	habitat
behavior of, 93–95;	conservation practices & wildlife,
brush management &, 145, 148;	255–290;
conservation practices &, 75–104;	fire &, 86–87;
grazing &, 44;	invasive species &, 311–314
historical perspective of, 87–89	
invasive plant management &, 300–301,	herbicides
308;	brush management &, 119, 124,
management of, 93–95;	126–128, 133, 135, 141–142;
native species &, 305, 308;	invasive plant management &, 301,
research, 95–101; riparian management &, 225–226,	304–305, 31 <i>7</i> –319
235–236, 240	herbivores
200 200, 240	brush management &, 129–131;
forage quantity and quality	riparian management &, 215–224,
brush management &, 129–131;	226–227, 229–233, 240
fire &, 82;	
grazing &, 25, 27–29, 49–53, 269–274;	heterogeneity
invasive plant management &, 297–303	societal, 350–351;
G	spatial, 345–347
	T
game birds, conservation practices &,	
256–261, 277	invasive plants
	biocontrol &, 317-319
grazing	encroachment of, 107–170;
amphibians &, 273, 275–276; continuous, 26, 28–30, 32–33, 42–44;	fire &, 84;
drought &, 26–27;	integrated pest management &, 293–294 invasion mechanisms of, 307–309
economics of, 382–387, 402–403;	knowledge gaps of, 319–323
fire &, 44, 82, 86, 96;	management of, 291-336;
game birds &, 258–259;	prevention of, 294–297
invasive plant management &, 301–302,	recommendations for, 319–323
304;	riparian management &, 233
knowledge gaps of, 55–57	wildfire prevention &, 314–316
livestock &, 45–46, 258–265;	1
nongame birds &, 262–265; recommendations for, 49–55	L
reptiles &, 273, 275–276;	landscape approach
riparian management &, 215-224,	conservation value of, 344–351
226–227, 229–233, 240;	conservation practices &, 257–258,
rotational, 26, 28, 29–34, 42–44, 57	337–370;
small mammals &, 273–276;	definition and concepts of, 340–343
soil carbon &, 46	knowledge gaps of, 363–364
stocking rate &, 25, 27, 32, 34	model-based, 355–360

Index 427

spatial hierarchy &, 351–355 materials selection &, 175–177 recommendations for, 360–363 recommendations for, 185 seedbed preparation &, 177-178 weather forecasting &, 186–188 livestock brush management &, 129-131; distribution of, 45-46; reptiles, conservation practices &, 35, 273, fire &, 92; 275-276, 278-279 grazing &, 258-265; invasive plants &, 297-299 riparian management predators &, 265-268; assessment of, 215-252; production of, 23-24, 28, 30, 55; economics of, 396-397, 404-405; riparian management &, 215-224, grazing &, 33, 219-224, 263-266, 226-227, 229-233, 240; 273-276; wildlife &, 256-259, 262-265, 268invasive plant management &, 310-311; 276 knowledge gaps of, 239 recommendations on, 237–239 M restoration of, 226-227 stream temperature &, 234-235 mowing, invasive plant management &, water quality &, 229-230 303, 305 S mulching, range planting &, 178, 184–185 socioeconomic assessment Ν conservation expenditures &, 378-382 conservation impacts &, 373–376 nongame birds innovation and adoption &, 400-406 brush management &, 139, 260; knowledge gaps of, 409-411 grazing &, 35-37, 261-265, 277 social considerations of, 399-406 recommendations for, 409-410 P small mammals plant-materials, range planting &, conservation practices &, 273-276, 176-177, 188-189 278-279; fire &, 86, 97; pollution, riparian management &, grazing &, 35, 37-38, 40; 228-229, 240 riparian systems &, 232-233 precipitation smoke management, fire &, 92-93 brush management &, 137; range planting &, 175–176 social value, conservation practices &, 371-422 predators, livestock &, 265-268 soils, fire &, 89-92, 97-98, R spatial pattern, landscape approach to, 347-348 range planting brush management &, 128 depth and rate of, 179-181 stocking rate economics of, 394-396, 404; economics of, 383-386, 388; knowledge gaps of, 185–190 grazing &, 23, 25-30, 32-35, 42, integrated pest management &, 303, 44-45, 47, 49-54, 57, 258-260 305-306

U weed control biological, 302-303, 309; ungulates grazing &, 301-302, 308-309; herbicides &, 301; conservation practices &, 268-273, 278; fire &, 86, 99; mechanical, 303; grazing &, 40-43; range planting &, 182 riparian systems &, 223 wildfire upland wildlife habitat, economics of, brush management &, 136-145, 148, 397-399, 405-406 150; grazing &, 44 W wildlife water conservation practices &, 253-290; fire &, 87, 97-98; economics of, 397-399 fire &, 86-87, 97; grazing &, 32-33; grazing &, 34-44, 262, 273-275 invasive plant management &, 309-311, invasive species &, 311-314 range planting &, 184–185 knowledge gaps of, 277-279 stocking rate &, 24, 34-35, 37, 40-42, watershed 44, 50-53, 55-57 brush management &, 131–136; recommendations on, 276 reptiles and amphibians &, 275-276 grazing &, 33 riparian management &, 230–233 weather brush management &, 137; woody plants encroachment of, 107-170, 260; range planting &, 175-176, 181-183, 186-188; fire &, 95-96; woody plant encroachment &, 116–117 riparian management &, 234-235, 240

Index 429