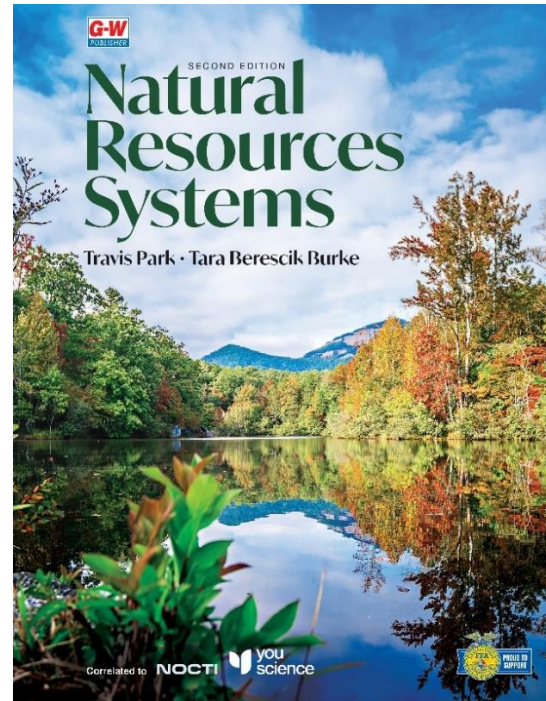


*Correlation
of*
Natural Resources Systems
Travis Park, Tara Berescik Burke
(Goodheart-Willcox Publisher ©2025)
to
**NOCTI Natural Resources
Management**
West Virginia Department of
Education



Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
Foundations of Agriculture, Food, and Natural Resources	
Demonstrate understanding of agribusiness (e.g., SAE, expenses)	Career Development Events and Leadership Development Events p769
Demonstrate understanding of animal systems (e.g., breeds of livestock, anatomy)	Biogeochemical Cycles p83 Freshwater Finfish Species p512 Commercial Marine Finfish Species p515 Commercial Crustaceans and Mollusks p520 Game Species p535
Demonstrate understanding of agriculture innovation and technology	Technology and Innovation p115
Demonstrate understanding of food products and processing (e.g., protein sources, food preservation)	Locally Grown Foods p130 Food Source p361
Demonstrate understanding of natural resources (e.g., renewable resources)	Renewable or Nonrenewable? P4 Nonrenewable Natural Resources p9 Biotic and Abiotic Natural Resources p11 Natural Resources Mined in the United States p285

Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
Demonstrate understanding of plant systems (e.g., plant parts, processes, soil)	Biogeochemical Cycles p83 Soil Components p200 Soil Formation p206 Soil Classification p219 Photosynthesis and Respiration in Forests p568 Most Common Tree Species in the United States p569 Other Important Tree Species p574 Non-Tree Forest Plants p584
Demonstrate understanding of power, structural, and technical systems (e.g., measurement)	Measuring Air Quality p419 Land Measurement p720
Demonstrate knowledge of leadership development through FFA (e.g., motto, parliamentary procedure, official dress)	Developing Leadership Skills p36 The National FFA Organization p765
Soil and Land Management	
Demonstrate understanding of soil erosion and conservation (e.g., horizon, contour planting)	Shoreline, Channel, and Streambank Soil Erosion p242 Factors That Contribute to Soil Erosion p244 Tillage Systems p259 Conservation Buffers p264 Structural Conservation Practices p269
Exhibit knowledge of spatial tools such as Geographic Information Systems (GIS) and Global Positioning	Global Positioning System p722 Geographic Information Systems p724
Systems (GPS) and their use in resource management (e.g., satellite links, waypoint)	Global Positioning System p722 Geographic Information Systems p724
Display knowledge of topographic and aerial maps, soil surveys, and soil test results (e.g., benchmark elevation, pH, slope)	Soil Chemistry p217 Topographic Maps p729 USGS Topographical Maps p734
Water Management	
Demonstrate understanding of the hydrologic cycle (e.g., water holding capacity, acid rain)	Hydrologic Cycle p308

Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
Exhibit knowledge of watersheds and aquatic ecosystems, (i.e., wetlands, ponds, streams)_including wetland functions (e.g., eutrophication, Clean Water Act, water quality)	Clean Water Act p68 The Nitrogen Cycle p85 Groundwater Contamination p247 Locations of Water p310 Water Use p336 Water Pollution p342 Roles of Wetlands p359 Marine Wetlands p364 Freshwater Wetlands p368
Recognize aspects of aquifers and groundwater protection (e.g., soil drainage, manure nutrients)	Groundwater Contamination p247 Structural Conservation Practices p269 Locations of Water p310 Water Pollution p342
Identify point and non-point source pollution (e.g., riparian buffers)	Pollution p164 Soil Pollutants p247 Contamination of Water, Air, and Soil p297 Water Pollution p342 Chemical Pollution p408
Forest Management	
Define basic forestry concepts (e.g., site index, tree biology, forest measurements tolerant tree species)	Types of Forests p562 Healthy Forest Ecosystems p564 Sexual and Asexual Reproduction in Forests p566 Photosynthesis and Respiration in Forests p568
Display knowledge of dendrology (e.g., simple and compound leaves, samara)	Types of Forests p562
Recognize and define best management practices in forestry and state BMP regulations (e.g., prescribed burns)	Sustainable Forest Management p601 Management of Grasslands and Rangelands p656
Wildlife Management	
Demonstrate understanding of wildlife management practices (e.g., border cutting, wetland habitat, fall mast production)	Determining Habitat Health p138 Ecological Communities p434 Recover and Restore Efforts p480 Game Species Management p533 Maintaining Wildlife Populations p660
Environmental Laws and Government Agencies	Legislation and Natural Resources p67 Government Agencies p70

Correlation of *Natural Resources Systems* to NOCTI Natural Resources Management WV—page 4

Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
Exhibit knowledge of environmental regulations and laws (e.g., timber management, protection of imperiled species)	Legislation and Natural Resources p67 Sustainable Forest Management p601 Management of Grasslands and Rangelands p656 National Protected Areas p694
Agricultural Innovation, Technology, and Entrepreneurship	
Define and recognize aspects of sustainability (e.g., biodiesel)	Three Pillars of Sustainability p110 Technology and Innovation p115 Sustainable Energy: SEforALL p119 Measuring Sustainability p129 Sustainable Forest Management p601 Sustainability and Outdoor Recreation p686
Identify aspects of the impact of international agriculture on U.S. and global natural resources (e.g., cost and availability, entrance of new species into country)	Land Use p156 Water Use p161 Power Production and Regulation p 162 Social Pressures p 162 Pollution p164 Economic Value of Resources p163 Ecological Footprint p169 Global Climate Change p505