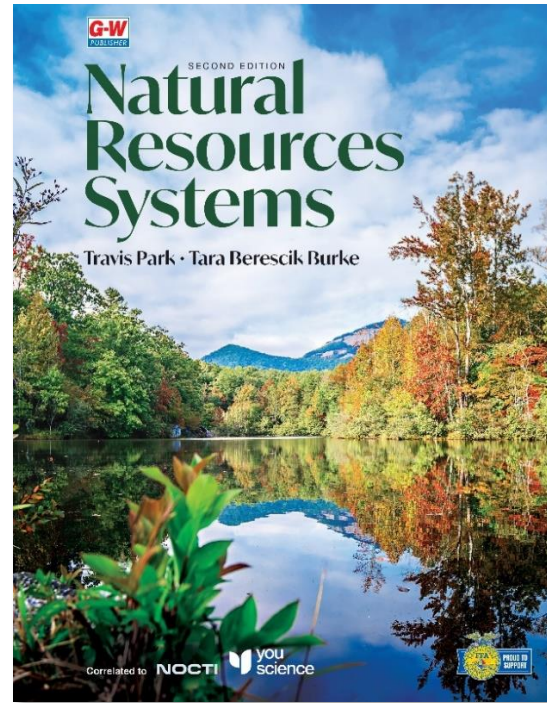


**Correlation
of
Natural Resources Systems**
Travis Park, Tara Berescik Burke
(Goodheart-Willcox Publisher ©2025)
to
NOCTI Natural Resource Systems



Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
General Agriculture, Food and Natural Resources Technical Skills	
Apply knowledge of the basics of animal systems	Determining Habitat Health p138 Ecological Communities p434 Food Webs and Energy Transfer p444 Keystone Species p447 Invasive Species p454 Biodiversity and Ecological Health p474
Apply knowledge of the basics of plant and insect systems	Types of Forests p562 Sexual and Asexual Reproduction in Forests p566 Photosynthesis and Respiration in Forests p568 Forest Insect Pests p627 Types of Grasslands p648

Correlation of *Natural Resources Systems* to NOCTI Natural Resource Systems—page 2

Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
Apply knowledge of the basics of soil, water, and air systems	Biogeochemical Cycles p83 Soil Functions p200 Soil Components p200 Soil Formation p206 Physical Properties of Soil p211 Soil Chemistry p217 Soil Classification p219 Water Chemistry p332 Weather Patterns p391 Air Chemistry p406
Use, maintain, and store tools and equipment appropriately	Surveying Tools p721
Analyze current issues in the fields of Animal Science, Natural Resources, and Agricultural Biotechnology	Invasive Species: The Burmese Python p147 Water Rights: Conflict in California p323 Marine Ecosystems: Why Are We Losing Coral Reefs? p366 Effects of Climate Change: The 100th Meridian p662
Natural Resource Systems Technical Skills	
Recognize importance of resource and human interrelations to conduct management activities in natural resources	Legislation and Natural Resources p67 Government Agencies p70 Advocacy Organizations p73 Making a Difference p130 Wetland Conservation and Management p374 Wetland Rehabilitation and Restoration p375 Focusing on Solutions p423 Fisheries Management p510 Game Species Management p533 Sustainable Forest Management p601 Management of Grasslands and Rangelands p656

Correlation of *Natural Resources Systems* to NOCTI Natural Resource Systems—page 3

Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
Understand importance and methods of protecting natural resources	Legislation and Natural Resources p67 Government Agencies p70 Advocacy Organizations p73 Pollution p164 Ecological Footprint p169 Wetland Conservation and Management p374 Wetland Rehabilitation and Restoration p375 Focusing on Solutions p423 Recover and Restore Efforts p480 Sustainable Forest Management p601 Management of Grasslands and Rangelands p656
Apply scientific principles to natural resource management activities	Wetland Conservation and Management p374 Sustainable Forest Management p601 Management of Grasslands and Rangelands p656
Academic Foundations	
Apply reading skills in an Animal Science, Natural Resources, and Agricultural Biotechnology environment	Communication Skills p39 Communicating about Natural Resources p19, 107, 135, 153, 197, 279, 305, 329, 355, 381, 403, 431, 489, 743
Apply writing skills in an Animal Science, Natural Resources, and Agricultural Biotechnology environment	Communication Skills p39 Communicating about Natural Resources p19, 595, 645, 667, 691, 743 STEM and Academic Activities p48, 49, 305
Apply mathematical skills in an Animal Science, Natural Resources, and Agricultural Biotechnology environment	STEM and Academic Activities p49, 79, 107, 135, 197, 230, 279, 305, 354, 380, 403, 460, 488, 528, 558, 616, 617, 690, 716, 717, 742
Apply science skills in an Animal Science, Natural Resources, and Agricultural Biotechnology environment Systems	STEM and Academic Activities p18, 79, 134, 152, 174, 196, 230, 254, 255, 279, 354, 380, 381, 431, 460, 488, 528, 529, 558, 559, 594, 616, 617, 644, 666, 667, 690, 691, 743
Understand the major governing bodies and groups that impact how Animal Science, Natural Resources, and/or Agricultural Biotechnology organizations function (e.g., EPA)	Legislation and Natural Resources p67 Government Agencies 70 Advocacy Organizations 73 International Union for Conservation of Nature 464
Demonstrate knowledge of economic principles as applied to Animal Science, Natural Resources, and/or Agricultural Biotechnology systems (e.g., supply and demand, profit)	Economic Strength p160 Economic Value of Resources p163 Fisheries and the Economy p502 Game Hunting and the Economy p532 Economic Impact of Outdoor Recreation p670

Correlation of *Natural Resources Systems* to NOCTI Natural Resource Systems—page 4

Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
Ethics and Legal Responsibilities	
Understand the major laws and regulations that impact the Animal Science, Natural Resources, and/or Agricultural Biotechnology industry	Legislation and Natural Resources p67
Identify and practice ethical behavior in the workplace	Ethical Workplace Behavior p42
Communications	
Locate, organize, and reference written information from reliable sources to communicate with coworkers and clients	Communication Skills p39
Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences	Communication Skills p39
Apply listening skills and interpret verbal and nonverbal behaviors to enhance communication with coworkers and clients	Are You a Good Listener? p39 Nonverbal Communication p41
Interpret and use tables, charts, and graphics to support written and oral communication	Communication Skills p39
Information Technology Applications	
Use computers and software to increase general work efficiency	Computer Ethics p42
Use information technology tools specific to Animal Science, Natural Resources, and/or Agricultural Biotechnology to access and manage information (e.g., GPS)	Surveying Tools p721 Global Positioning System p722 Geographic Information Systems p724
Problem Solving, Critical Thinking, and Decision Making	
Use problem solving and critical thinking skills to locate sources of information about problems and determine appropriate methods for investigating causes	Decision Making and Problem Solving p38 Career Development Events and Leadership Development Events p769
Use problem solving and critical thinking skills to determine root causes of problems and suggest solutions	Decision Making and Problem Solving p38 Career Development Events and Leadership Development Events p769
Leadership and Teamwork	
Exhibit leadership practices to improve production and quality of work and work environment	Succeeding in the Workplace p35 Student Organizations: Developing Leadership Skills p36
Work effectively in a team environment to improve the quality of work and the work environment	Succeeding in the Workplace p35 Communication Skills p39
Safety, Health, and Environmental	

Correlation of *Natural Resources Systems* to NOCTI Natural Resource Systems—page 5

Standards	Textbook Pages
Specific Standards and Competencies Included in this Assessment	
Identify and practice appropriate environmental, health, and safety procedures for Animal Science, Natural Resources, and/or Agricultural Biotechnology occupations	Succeeding in the Workplace p35 Field Safety p550 Responsible Engagement and Safety p671 Survival Skills and Supplies p683
Demonstrate appropriate first aid knowledge and procedures for Animal Science, Natural Resources, and Agricultural Biotechnology occupations	Survival Skills and Supplies p683
Employability and Career Development	
Demonstrate employability skills related to a career in Animal Science, Natural Resources, and Agricultural Biotechnology	The Job Interview p34 Succeeding in the Workplace p3
Pursue career development skills to advance in Animal Science, Natural Resources, and/or Agricultural Biotechnology careers	Contributing to Your Career Success p24 Succeeding in the Workplace p35 Communication Skills p39 Ethical Workplace Behavior p42