Wildlife and Fisheries
18501

Rationale Statement:

Management of South Dakota's wildlife and fisheries is critical to our future economic stability. Skills gained in this area will be beneficial to students seeking careers in the many facets of wildlife and fisheries. The Wildlife and Fisheries course addresses the biological and environmental issues related to wildlife and fisheries management within our state. Classroom and laboratory content may be enhanced by utilizing appropriate equipment and technology. Biology, English and human relations skills will be reinforced throughout the course. Work-based learning strategies appropriate for this course are school-based enterprises and field trips. Opportunities for application of clinical and leadership skills are provided by participation in FFA activities, conferences and skills competitions such as the Natural Resources Career Development Event or related proficiency award areas. All students are expected to complete a Supervised Agricultural Experience program.

Suggested grade level: 9^{th} – 12^{th}

Topics covered:

- Fish and wildlife management
- Fish species
- Wildlife species
- Habitat
- Hunting
- Fishing
- Regulations
- Processing game and fish for consumption
- Safety
- Animal behaviors
- Disease

Indicator #1: Demonstrate the importance of fish and wildlife management, including their respective habitats.	
Bloom's Taxonomy Level	**Standards**
Applying	**WF 1.1 Apply knowledge of natural resource components to the management of wildlife and fish.** Examples: • Illustrate the interdependence of organisms within an ecosystem. • Dramatize predator and prey population relationships. • Create a food web to interpret wildlife relationships. • Differentiate factors that influence population density and population dispersion. • Operate a field study of an ecosystem and record observations of species interactions.
Understanding	**WF 1.2 Identify fish and wildlife species.** Examples: • Identify aquatic species based on morphological characteristics. • Identify game animals based on morphological characteristics. • Identify birds based on morphological characteristics. • Classify endangered and threatened species of wildlife. • Identify non-game animals based on morphological characteristics. • Conduct a field inventory of a wildlife or aquatic species and document the findings.
Understanding	**WF 1.3 Identify healthy habitat for wildlife and fish.** Examples: • Recognize the characteristics of healthy wildlife habitat for various species. • Select characteristics of a healthy aquatic habitat for various fish species. • Report on methods for improving wildlife or fish habitat. • Survey a habitat and report on comprehensive improvements that must be made. • Examine waterfowl migration, including why migration occurs. • Discuss land and water carrying capacity for fish and wildlife.

Indicator #2: Identify economic and social issues related to fish and wildlife.	
Bloom's Taxonomy Level	**Standards**
Understanding	**WF 2.1 Discuss the importance of hunting/harvesting fish and wildlife species and the related responsibility.** Examples: • Translate SD Game, Fish and Parks hunting/fishing laws. • Paraphrase trapping methods and create a position paper on the topic. • Describe fish harvesting techniques and procedures. • Describe wildlife harvesting techniques and procedures. • Identify different viewpoints of hunting/fishing by interviewing people. • Identify management practices to protect fish and wildlife from overexploitation.
Applying	**WF 2.2 Demonstrate processing techniques to use game and fish as food sources.** Examples: • Identify potential diseases carried by game species that could infect meat. • Illustrate food products that can be obtained from various wildlife species. • Illustrate the uses of South Dakota fish for consumption. • Safely process wild game and fish species for consumption. • Demonstrate safe food handling techniques. • Demonstrate safe and proper food preparation.
Applying	**WF 2.3 Dramatize safety practices related to wildlife and fish.** Examples: • Demonstrate safety practices when hunting or fishing. • Become HuntSafe certified. • Demonstrate appropriate responses to accidents and injuries that occur while hunting and fishing.

Indicator #3: Compare life patterns of fish and wildlife.	
Bloom's Taxonomy Level	**Standards**
Analyzing	**WF 3.1 Differentiate fish and wildlife function and form in their daily lives.** Examples: • Compare and contrast physiological differences between mammals, birds and fish by viewing skeletal and muscular diagrams. • Distinguish form and function of body systems in various wildlife species. • Examine survival techniques used by wildlife species.
Understanding	**WF 3.2 Identify seasonal rituals of fish and wildlife species.** Examples: • Examine phases of ungulate animal rut. • Examine annual big game migration. • Describe why some animals don't migrate. • Discuss the hibernation process and identify animals that hibernate. • Analyze breeding seasons and rituals for wildlife and fish.
Evaluating	**WF 3.3 Diagnose wildlife and fish diseases.** Examples: • Evaluate the causes of diseases in fish and wildlife. • Appraise photos of fish and wildlife diseases to identify the affliction. • Select wildlife disease management techniques.