

MODULE CURRICULUM AND ASSESSMENT STANDARDS:

SECTION E: INTERMEDIATE LEVEL

The following pages define the curriculum and assessment standards for the intermediate level of Wildlife.

Intermediate level modules help students build on the competencies developed at the introductory level and focus on developing more complex competencies. They provide a broader perspective, helping students recognize the wide range of related career opportunities available within the strand.

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MODULE WLD2020: MEASURING THE VALUE (DIVERSITY OF WILDLIFE VALUES)

Level:	Intermediate
Theme:	Social and Cultural Perspectives
Prerequisite:	None
Module Description:	Students assess the significance of wildlife in society, analyze relationships between humans and wildlife, and research career opportunities in wildlife-related fields.

Module Parameters: Access to relevant government and community resources.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> compare and contrast the social, environmental and economic significance of wildlife 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> comparing and contrasting the social, environmental and economic significance of wildlife within two cultures (e.g., First Nation, European, Asian). <p><i>Assessment Tool</i> <i>Knowledge/Application Assessment: Significance of Wildlife, WLD2020–1</i></p> <p><i>Standard</i> <i>Respond to a standard of 2 on the rating scale</i> developing a plan for an ecotour (e.g., bird watching, whale watching, river rafting, horseback riding). Plan to address: <ul style="list-style-type: none"> reasons for taking the tour tour agenda/itinerary tour details guidelines for minimum environmental impact. <p><i>Assessment Tool</i> <i>Criteria for Planning an Ecotour, WLD2020–2</i></p> <p><i>Standard</i> <i>Complete the plan to a standard of 2 on the rating scale</i></p> </p>	40
<ul style="list-style-type: none"> describe the impact of personal needs, wants, beliefs and actions on wildlife and wildlife habitats 	<ul style="list-style-type: none"> maintaining a log/journal of reflections and thoughts regarding the impact of personal attitudes, actions and lifestyle on wildlife and the environment, and ideas for environmental citizenship. <p><i>Assessment Tool</i> <i>Reflection Guide for Environmental Responsibility/Citizenship, WLDREF–ENV</i></p> <p><i>Standard</i> <i>Complete five journal/log entries; address criteria for reflection to a standard of 2 on the rating scale</i></p>	40

MODULE WLD2020: MEASURING THE VALUE (DIVERSITY OF WILDLIFE VALUES)
(continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • describe career opportunities and trends in wildlife-related fields • demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • a proposal (oral, written or visual) that suggests one personal action and one leadership role in relation to wildlife conservation and environmental citizenship. <p><i>Assessment Tool</i> <i>Assessment Criteria: Proposal for Environmental Action, WLDPRO</i> <i>Sample Proposals: Wildlife Enhancement, WLDSAM</i></p> <p><i>Standard</i> <i>Complete each proposal to a standard of 2 on the rating scale</i></p> <ul style="list-style-type: none"> • a letter written to a government official or environmental organization expressing support or concern regarding the impact of personal/societal actions on wildlife and habitat. <p><i>Assessment Tool</i> <i>Assessment Criteria: Letters of Support or Concern, WLDLET</i></p> <p><i>Standard</i> <i>Complete the letter to a standard of 2 on the rating scale; critique of response is optional</i></p> <ul style="list-style-type: none"> • given current information on career opportunities in wildlife-related fields (e.g., recreation, tourism, resource consumption, literature/art/drama, conservation and management, research, education), completing a research project on one or more careers in the wildlife sector. <p><i>Assessment Tool</i> <i>Career Search: Intermediate Level, WLDCAR-2</i></p> <p><i>Standard</i> <i>Conduct research to a standard of 2 on the rating scale</i></p> <ul style="list-style-type: none"> • observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tools</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p></p> <p>20</p> <p>Integrated throughout</p>

MODULE WLD2020: MEASURING THE VALUE (DIVERSITY OF WILDLIFE VALUES)
(continued)

Concept	Specific Learner Expectations	Notes
Significance of Wildlife	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain how human and wildlife relationships are expressed through religious teachings, art, music, drama, literature, photography or other means of expression • describe present and future social and health benefits that may be derived from wildlife; e.g.: <ul style="list-style-type: none"> – recreational – medicinal – spiritual and aesthetic • explain how wildlife may be used as a barometer of overall environmental quality; e.g.: <ul style="list-style-type: none"> – water, air and soil quality – diversity of life forms • infer relationships among the distribution and abundance of wildlife and the economy of a given area; e.g.: <ul style="list-style-type: none"> – tourism – commercial trade – industrial products. 	<p>See <i>Project Wild</i> (Section 2: Diversity of wildlife values).</p> <p>Interview a religious leader about the significance of wildlife in his or her belief system.</p> <p>Visit an art gallery and survey expressions of wildlife through art forms.</p> <p>Gather and display advertisements for ecotours.</p> <p>Interview a local RCMP or conservation officer about the confiscation of wildlife parts.</p> <p>Prepare a tally sheet of pros and cons regarding several uses of wildlife.</p>
Personal Impact	<ul style="list-style-type: none"> • describe the impact of individual attitudes, actions and lifestyle on wildlife and the environment; e.g., <ul style="list-style-type: none"> – pursuit of leisure time and outdoor activities – patterns and levels of resource consumption – subsistence and commercial trade – consumptive/conservation ethic • describe the impact of human population growth on wildlife and its habitat; e.g.: <ul style="list-style-type: none"> – rural and urban development – pollution – patterns and levels of resource consumption – recreation and tourism • propose responsible and ethical lifestyle actions in relation to wildlife and the environment; e.g.: <ul style="list-style-type: none"> – personal actions – leadership roles. 	<p>Conduct debates on current wildlife issues.</p> <p>Consider:</p> <ul style="list-style-type: none"> • use of water and energy • housing and transportation choices. <p>Consider:</p> <ul style="list-style-type: none"> • transportation corridors • extraction/harvest of natural resources • addition of materials to the environment. <p>Write letters of praise/concern to government agencies and environmental organizations.</p> <p>Design a poster that illustrates responsible actions in relation to wildlife and environment.</p>

MODULE WLD2020: MEASURING THE VALUE (DIVERSITY OF WILDLIFE VALUES)
(continued)

Concept	Specific Learner Expectations	Notes
Career Opportunities	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify employment opportunities related to wildlife in both public and private sectors at local, national and international levels • outline career areas and the range of occupational opportunities within wildlife-related fields; e.g.: <ul style="list-style-type: none"> – recreation – tourism – resource harvesting – literature, art and/or film – conservation and management – research – education • gather employment statistics within one or more career areas; e.g.: <ul style="list-style-type: none"> – types of careers – number of workers – employment trends • infer career opportunities and trends from employment statistics • research one or more career opportunities in a wildlife-related field; e.g.: <ul style="list-style-type: none"> – job description/working conditions – entry requirements/competencies – educational/training opportunities – wage and security of employment relative to other fields – opportunity for advancement – opportunity for self-employment and entrepreneurship. 	<p>Gather information through:</p> <ul style="list-style-type: none"> • post-secondary calendars • interviews with people employed in the field • job search manuals • employment offices • newspapers and government publications. <p>Obtain National Occupational Profiles (NOC).</p> <p>Contact the “Career Hotline” (telephone 1-800-661-3753).</p>

MODULE WLD2030: OUTDOOR EXPERIENCES 2 (WILDERNESS EXCURSION)

Level:	Intermediate
Theme:	Social and Cultural Perspectives
Prerequisites:	WLD1030 Outdoor Experiences 1 (Survival Skills) Emergency First Aid (current certification)
Module Description:	Students plan, prepare for and conduct an extended outdoor wilderness trip.

Module Parameters: Access to an outdoor wilderness environment and gear for outdoor expeditions. Instructor training (current certification) in Standard Level First Aid is required; instructor training in First Aid in the Wilderness is recommended.

Teachers may find it desirable to access the services of a qualified Outdoor Guide in delivering components of this module.

Off-campus learning activities must be commensurate with previous levels of wilderness training and experience; day trips should precede extended overnight trips; experience in hardcover camping should precede potential softcover camping and/or emergency shelter camping opportunities.

Note: Specific learner expectations in Outdoor Experiences 1 and 2 link with the *National Occupational Standards for Outdoor Guide* (Alberta Tourism Education Council), and address core skills in Environmental Awareness, Camp and/or Trip Operation, Safety and Survival.

See Section C (Planning for Instruction) and Section H (Linkages/Transitions) of this Guide for further information on instructor training/certification and linkages.

Supporting Module: CTR1210 Personal Safety (Management) [Career Transitions Strand]

Because of the practical nature of this module, students must have a general knowledge of basic first-aid and survival techniques relevant to wilderness environments. See Planning for Instruction in Section C for further information on student safety.

Note: WLD1030 and WLD2030 (Outdoor Experiences 1 and 2) provide opportunities for wilderness interaction at a personal level. This module sequence should place emphasis on developing skills that will enable students to safely observe and appreciate wildlife and habitat within one or more of Alberta's six natural regions.

MODULE WLD2030: OUTDOOR EXPERIENCES 2 (WILDERNESS EXCURSION) (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • successfully participating in activities while en route that involve personal interaction with the wilderness environment. <p><i>Assessment Tool</i> <i>Task Checklist: Outdoor Experiences 2, WLD2030-1</i></p> <p><i>Standard</i> <i>Complete four of the activities (as outlined in the task checklist) that involve personal interaction with the wilderness environment to a standard of 2 on the rating scale</i></p> <ul style="list-style-type: none"> • a post-trip assessment that provides observations and personal impressions, and summarizes: <ul style="list-style-type: none"> – activities well done – problems encountered and suggested solutions – recommendations regarding future trips. <p><i>Assessment Tool</i> <i>Post-Trip Assessment for Outdoor Experiences 2, WLD2030-2</i></p> <p><i>Standard</i> <i>Achieve a performance rating of 2 in applicable areas of post-trip assessment</i></p> <ul style="list-style-type: none"> • observations of individual effort and interpersonal interaction throughout the learning process. <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

MODULE WLD2030: OUTDOOR EXPERIENCES 2 (WILDERNESS EXCURSION) (continued)

Concept	Specific Learner Expectations	Notes
<p>Trip Planning and Preparation</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • establish specific objectives for an outdoor wilderness trip; e.g.: <ul style="list-style-type: none"> – goals and expectations – length of trip – destination – general schedule and agenda • incorporate guidelines for environmental awareness into trip planning and preparation; e.g.: <ul style="list-style-type: none"> – principles of ecotourism – consideration for carrying capacity of the area – strategies for minimum impact land use • identify and obtain appropriate supplies, equipment and personal gear for the trip; e.g.: <ul style="list-style-type: none"> – water and food – tents, stoves, axe – first-aid and survival kits – clothing and foot wear – toiletries • devise plan for weather and seasonal conditions; e.g.: <ul style="list-style-type: none"> – identify hazards particular to the area – listen to weather and news reports and forecasts • conduct a pre-trip assessment of supplies, equipment and personal gear; e.g.: <ul style="list-style-type: none"> – compare to trip checklist – assess quality, quantity and condition – assess relative to weather and seasonal conditions – obtain missing and/or specialty items 	<p>Hold a pre-trip meeting with students and their parents/guardians prior to the excursion to confirm trip details. Obtain information regarding special needs (e.g., physical limitations, special dietary requirements). Discuss trip expectations.</p> <p>Obtain <i>Travel Alberta's Adventure Guide</i> (published annually) for a list of outfitters/guides available throughout the province.</p> <p>List potential environmental impacts that may result from the trip. Write before and after journal entries to document impact on a campsite.</p> <p>List all supplies and equipment to be taken on the trip. Identify items that may have significant environmental impact—note considerations for use or alternatives that would lessen impact.</p> <p>Establish methods of regular and emergency communication, and a contingency plan to be used if regular communication is interrupted.</p> <p>Compare supplies to checklist. Ensure all equipment is in satisfactory working condition. Pack supplies/equipment in waterproof containers.</p>

MODULE WLD2030: OUTDOOR EXPERIENCES 2 (WILDERNESS EXCURSION) (continued)

Concept	Specific Learner Expectations	Notes
<p>Trip Planning and Preparation (continued)</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • prepare supplies, equipment and personal gear for transportation • devise plan for courses of action to cope with potential emergency situations in the wilderness; e.g.: <ul style="list-style-type: none"> – extreme weather conditions – fire or flood – injury and illness. 	<p>Potential linkages exist with the “First Aid in the Wilderness” certificate course (see Section H: Transitions/Linkages).</p> <p>Outline requirements for survival and first-aid kits.</p>
<p>Conducting and Concluding the Trip</p>	<ul style="list-style-type: none"> • follow guidelines for safe outdoor travel; e.g.: <ul style="list-style-type: none"> – inform responsible person of travel plans – follow travel schedule as planned – use orientation and navigational skills – identify potential hazards and take necessary precautions – dress according to mode of travel, weather and season – watch for changes in weather conditions • set up a wilderness camp site, following guidelines for comfort, safety and least possible environmental impact; e.g.: <ul style="list-style-type: none"> – select camp site considering: <ul style="list-style-type: none"> • site exposure and drainage • access to water and firewood • impact on flora and fauna • proximity to potential dangers – erect tent or lean-to – assemble other amenities – protect food from wildlife and spoilage – protect equipment from the elements • follow minimal impact guidelines in establishing: <ul style="list-style-type: none"> – latrine location and toilet procedures – wash area and procedures – fire site and use – methods of garbage and waste water disposal • comply with local, provincial and federal legislation relevant to activities that are undertaken 	<p>Be aware of hazards particular to the area. Listen to weather and news reports. Carry survival equipment.</p> <p>Reroute, postpone or cancel trip if conditions threaten safety.</p> <p>Select dry, level ground. Consider potential hazards, including fire, rock slides, avalanches, dead materials close to shelter.</p> <p>Dig deep hole for toilet pit. Provide soil and environmentally friendly substance to decrease odour and speed decomposition. Use biodegradable soap.</p> <p>Consider land use, permits, seasonal restrictions, quotas, etc. Seek clarification if necessary. Report violations.</p>

MODULE WLD2030: OUTDOOR EXPERIENCES 2 (WILDERNESS EXCURSION) (continued)

Concept	Specific Learner Expectations	Notes
<p>Conducting and Concluding the Trip (continued)</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • assume outdoor camp duties on a rotational basis; e.g.: <ul style="list-style-type: none"> – meal preparation – camp maintenance and hygiene • demonstrate practical knowledge and skills in at least three areas relevant to wilderness interaction; e.g.: <ul style="list-style-type: none"> – plant or animal identification – animal track and scat identification – use of equipment – survival skills • monitor the activities of wildlife in the area and take precautions to avoid dangerous situations; e.g.: <ul style="list-style-type: none"> – observe animal behaviours – observe social patterns/relationships – identify wildlife hazards • describe evidence of human impact on flora, fauna and/or natural habitat • follow appropriate procedures to break camp; e.g.: <ul style="list-style-type: none"> – pack supplies, equipment and personal gear – take down shelter – clean site • conclude the wilderness trip and conduct a post-trip assessment; e.g.: <ul style="list-style-type: none"> – observations and personal impressions – problems encountered – recommendations regarding future trips. 	<p>Have students participate in all areas of preparation, operation and clean-up. Alternate chores during trip.</p> <p>Reference the activities and suggestions provided in <i>The Art of Seeing and Tracking</i>.</p> <p>Make plaster casts of animal tracks; examine fur, skulls, bones, nests, etc.</p> <p>Dispose of garbage properly. Store food safely. Maintain safe distance from wildlife.</p> <p>Do circle tour of camp— look for garbage and misplaced equipment.</p> <p>Develop a slide/tape presentation based on the outdoor trip.</p> <p>Consider:</p> <ul style="list-style-type: none"> • satisfaction with equipment and supplies • suitability of environment or route • inconsistencies between trip and expectations.

MODULE WLD2040: WILDLIFE SPACES & SPECIES

Level: Intermediate

Theme: Technology and Applications

Prerequisite: None

Module Description: Students present the results of research on wildlife spaces and species in Alberta and other parts of the world, and compare different strategies used in wildlife management.

Module Parameters: Access to relevant government and community resources.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • identify and compare representative ecoregions in Alberta and Canada with similar ecoregions in other parts of the world • identify and describe threatened or endangered wildlife spaces and species in Alberta and Canada 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • completing a research project on representative wildlife spaces and species in Canada and other parts of the world. Research to involve identification of: <ul style="list-style-type: none"> – seven major ecoregions of Canada – five World Heritage sites. <p><i>Assessment Tool</i> <i>Research Process: Representative Wildlife Spaces and Species, WLD2040-1</i></p> <p><i>Standard</i> <i>Complete all components of the research project to a standard of 2</i></p> • a teacher-prepared assessment in which the student demonstrates general knowledge of Canada’s spaces and species. <p><i>Assessment Tool</i> <i>Sample Assessment Items: Canada’s Spaces and Species, WLD2040-2</i></p> <p><i>Standard</i> <i>Response indicating 80% mastery</i></p> • identifying and explaining: <ul style="list-style-type: none"> – the roles of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and the Canadian Register of Heritage Properties (CRHP) – the five categories of species at risk in Canada – methods used to identify spaces at risk in Canada. <p><i>Assessment Tool</i> <i>Knowledge/Application Assessment: Endangered Spaces and Species, WLD2040-3</i></p> <p><i>Standard</i> <i>Respond to a standard of 2 on the rating scale</i></p> 	<p>30</p> <p>40</p>

MODULE WLD2040: WILDLIFE SPACES & SPECIES (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • describe and compare local and global strategies for wildlife protection and habitat management • demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • a presentation or report on a threatened or endangered space or species in Alberta or Canada. Presentation/report to address: <ul style="list-style-type: none"> – identification of the space or species through oral/written description <u>and</u> an illustration/map – the range of the species or area of the space as indicated on a map – past and present population numbers and/or changes in boundaries – factors contributing to the present status of the space or species – actions being taken to preserve the space or species. <p><i>Assessment Tool</i> <i>Presentations/Reports: Intermediate Level, WLDPRE–2</i></p> <p><i>Standard</i> <i>Achieve a minimum rating of 2 on the rating scale for Presentations/Reports</i></p> <ul style="list-style-type: none"> • identifying and comparing roles, responsibilities and strategies relevant to two local, two national and two international programs currently implemented to manage and protect spaces and species. <p><i>Assessment Tool</i> <i>Knowledge/Application Assessment: Wildlife Management Programs, WLD2040–4</i></p> <p><i>Standard</i> <i>Respond to a standard of 2 on the rating scale</i></p> <ul style="list-style-type: none"> • observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>30</p> <p>Integrated throughout</p>

MODULE WLD2040: WILDLIFE SPACES & SPECIES (continued)

Concept	Specific Learner Expectations	Notes
<p>Representative Spaces and Species</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify representative ecoregions in Alberta and Canada, and indicator species found in these regions • illustrate the interdependence of wildlife species within selected ecoregions of Alberta and Canada; e.g.: <ul style="list-style-type: none"> – food webs – energy chains • identify regulating factors for wildlife species within selected ecoregions of Alberta and Canada; e.g.: <ul style="list-style-type: none"> – food and water – habitat – predators – carrying capacity – species competition – disease/parasites – other environmental factors • compare representative ecoregions in Alberta and Canada with similar ecoregions in other parts of the world; e.g.: <ul style="list-style-type: none"> – climate – geography – indicator species. 	<p>Suggested teacher resource for background information: <i>The Nature of Canada: A Primer on Spaces and Species</i> (Environment Canada).</p> <p>Obtain <i>Natural Regions of Alberta</i> map (Alberta Environmental Protection).</p> <p>Outline major ecoregions of Canada on a map.</p> <p>Design a food web for a first-level carnivore found in Alberta.</p> <p>Compare and contrast wildlife in similar ecoregions around the world.</p>
<p>Endangered Spaces and Species</p>	<ul style="list-style-type: none"> • research policy and factors used to determine if a species or population is endangered • define and give examples of endangered spaces and species • explain how societal actions may cause wildlife spaces and species to become threatened or endangered; e.g.: <ul style="list-style-type: none"> – human population growth – habitat loss: deforestation and agriculture – unsustainable use of renewable resources – wasteful consumption – pollution 	<p>Discuss factors used to determine the status (population health) of wildlife.</p> <p>Consider direct and indirect causes of extinction:</p> <ul style="list-style-type: none"> • overfishing • habitat loss. <p>Investigate:</p> <ul style="list-style-type: none"> • The Endangered Spaces Campaign • The Canadian Wilderness Charter • Canadian Council on Ecological Areas • Special Places 2000.

MODULE WLD2040: WILDLIFE SPACES & SPECIES (continued)

Concept	Specific Learner Expectations	Notes
Endangered Spaces and Species (continued)	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • present the results of research on an endangered wildlife space or species in Alberta or Canada. 	See “Focus on Research.”
Canada in a Global Context	<ul style="list-style-type: none"> • explain the role of protected spaces in managing ecosystems at local, national and global levels; e.g.: <ul style="list-style-type: none"> – parks – wildlife and wilderness areas – migratory bird sanctuaries – ecological reserves – world heritage sites – private landowners – grazing reserves • explain the role of public and private organizations in Canada and other nations with regard to managing and protecting wildlife; e.g.: <ul style="list-style-type: none"> – government – industry – environmental and other organizations • compare policies/philosophies regarding the sustainable management of wildlife and habitat in Canada with those of other nations and governments • summarize the viewpoints of indigenous peoples in Canada and other nations regarding the management of wildlife spaces and species; e.g.: <ul style="list-style-type: none"> – traditional wilderness use – current use and future directions. 	<p>Discuss the roles of provincial and federal governments in establishing policy for wildlife protection and management.</p> <p>Locate World Heritage sites in Canada and other parts of the world.</p> <p>Interview two or more persons working in support of a protected space. Summarize viewpoints regarding the value of protected spaces in managing wildlife and habitat.</p>

MODULE WLD2060: INTERACTIONS (WILDLIFE & SOCIETY)**Level:** Intermediate**Theme:** Management and Conservation**Prerequisite:** None**Module Description:** Students explain how human populations interact with wildlife, and describe management strategies that enable wildlife and society to coexist.**Module Parameters:** Access to relevant government and community resources.**Curriculum and Assessment Standards**

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> describe the effects of human population growth on wildlife 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> identifying and explaining three or more situations where changes in human populations have resulted in subsequent changes in wildlife (e.g., number, behaviour, habitat). <p><i>Assessment Tool</i> <i>Knowledge/Application Assessment: Human Interaction with Wildlife, WLD2060-1</i></p> <p><i>Standard</i> <i>Respond to a standard of 2 on the rating scale</i> <ul style="list-style-type: none"> given a map of Canada, identifying six spaces and/or species that have become threatened or endangered because of human population growth. <p><i>Assessment Tool</i> <i>Task Checklist for Mapping, WLDMAP</i></p> <p><i>Standard</i> <i>Complete applicable mapping tasks to a standard of 2 on the rating scale</i></p> </p>	10
<ul style="list-style-type: none"> describe the effects of land use practices on wildlife 	<ul style="list-style-type: none"> describing different land use practices, and the consequences of each for wildlife. Land use practices to be representative of those used in: <ul style="list-style-type: none"> – agriculture – energy and mining – forestry – tourism/outdoor recreation – urban planning. <p><i>Standard</i> <i>Identify 10 different land use practices, and the costs and/or benefits of each to wildlife</i></p>	45

MODULE WLD2060: INTERACTIONS (WILDLIFE & SOCIETY) (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • explain management strategies that enable wildlife and society to coexist 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • completing a research project on one technology or land use practice, and its impacts on wildlife and habitat. Research to address: <ul style="list-style-type: none"> – nature of the technology or land use practice – the wildlife spaces/species affected – benefits and costs for wildlife and society. <p><i>Assessment Tool</i> <i>Research Process: Impacts of Technology/Land Use, WLD2060–2</i></p> <p><i>Standard</i> <i>Complete all components of research to a standard of 2 on the rating scale</i></p> <ul style="list-style-type: none"> • given a current issue regarding land use and its consequences for wildlife, negotiating and debating the issue while assuming the role of one or more stakeholder groups. <p><i>Assessment Tool</i> <i>Negotiation and Debate: Intermediate Level, WLDNEG–2</i></p> <p><i>Standard</i> <i>Address criteria in negotiation/debate to a standard of 2 on the rating scale</i></p> <ul style="list-style-type: none"> • a presentation or report on an organization working to manage interactions between wildlife and society. Presentation/report to address: <ul style="list-style-type: none"> – goals/objectives of the organization – major stakeholder groups represented – management approaches/techniques – accomplishments of the organization to date – benefits and costs for wildlife and society. <p><i>Assessment Tool</i> <i>Presentations/Reports: Intermediate Level, WLDPRE–2</i></p> <p><i>Standard</i> <i>Complete presentation/report to a standard of 2 on the rating scale</i></p>	<p>45</p>

MODULE WLD2060: INTERACTIONS (WILDLIFE & SOCIETY) (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> a comparison of two existing wildlife management plans with respect to: <ul style="list-style-type: none"> goals approaches taken outcomes and accomplishments. <p><i>Assessment Tool</i> <i>Knowledge/Application Assessment: Comparing Wildlife Management Plans, WLD2060–3</i></p> <p><i>Standard</i> <i>Respond to a standard of 2 on the rating scale</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tools</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

Concept	Specific Learner Expectations	Notes
<p>Human Populations</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> describe how wildlife affects the development, movement and size of human societies explain the effects of human populations and developing technologies on wildlife and habitat give examples of the effects of human populations on wildlife and habitat in the local area; e.g.: <ul style="list-style-type: none"> changes in habitat distribution, diversity and abundance of species identify Canadian wildlife spaces and species that have become threatened, endangered and/or extinct as a result of the impact of human populations. 	<p>Make reference to:</p> <ul style="list-style-type: none"> developing nations historical development aboriginal groups. <p>Explore global issues:</p> <ul style="list-style-type: none"> tropical rainforest. <p>Graph local and global population growth over the past 10 years.</p> <p>Video/print studies.</p>

MODULE WLD2060: INTERACTIONS (WILDLIFE & SOCIETY) (continued)

Concept	Specific Learner Expectations	Notes
Land Use Practices	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify human and societal interactions with wildlife; e.g.: <ul style="list-style-type: none"> – agriculture – energy and mining – forestry – tourism and outdoor recreation – urban planning • identify the positive and negative aspects of human and societal interactions; e.g.: <ul style="list-style-type: none"> – food production/habitat loss – employment gains/species extinction • explain positive and negative effects of land use practices on wildlife; e.g.: <ul style="list-style-type: none"> – deforestation – habitat protection and improvement – agriculture: habitat loss and degradation, zero tillage, shelterbelts, pest management – diversification of land use by farmers: special crops, game ranching – range expansion of some species – habitat fragmentation – management of wildlife populations – urban expansion. 	<p>Student-directed research projects concerning specific land use practices and wildlife.</p> <p>Discussion/debate on land use issues.</p> <p>See “Wetland Environments” print materials and videos (Ducks Unlimited).</p>

MODULE WLD2060: INTERACTIONS (WILDLIFE & SOCIETY) (continued)

Concept	Specific Learner Expectations	Notes
<p>Managing Interactions</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • describe the goals and objectives of different stakeholder groups in managing interactions between wildlife and society; e.g.: <ul style="list-style-type: none"> – government and nongovernment organizations – business and industry – landowners – individual citizens • research possible approaches and techniques to manage interactions between wildlife and society; e.g.: <ul style="list-style-type: none"> – legal approaches – incentive programs – education programs – demonstration programs – land use planning – establishment of policies • describe the consequences of an existing management plan for wildlife; e.g.: <ul style="list-style-type: none"> – environmental – social, cultural and economic. 	<p>Use role playing, debate and panel discussion to examine views of different stakeholder groups.</p> <p>This module provides a good introduction to WLD209: Issues in Wildlife 1.</p> <p>Legal approaches: environmental impact assessments/reviews.</p> <p>Incentive Programs: Prairie Farm Rehabilitation Administration (PFRA), Wildlife Habitat Canada.</p> <p>Education programs: District Agriculturists/ Wildlife Biologists, Wetland Conservation Corporation, Alberta North American Waterfowl Management Plan Center (NAWMP), Ducks Unlimited.</p> <p>Demonstration programs: Agriculture Canada demonstrating grazing practices.</p> <p>Establishment of policies: Wildlife Policy for Canada, The Green Plan, Alberta and Canada Wetland Policies.</p> <p>Refer to:</p> <ul style="list-style-type: none"> • North American Waterfowl Management Plan • Peregrine Falcon Recovery Plan • Swift Fox Rehabilitation Project.

**MODULE WLD2070: HUNTING & GAME MANAGEMENT 2
(FIELD TECHNIQUES/REGULATIONS)**

Level:	Intermediate
Theme:	Management and Conservation
Prerequisite:	WLD1070 Hunting & Game Management 1 (Ethics/Game Identification)
Module Description:	Students demonstrate knowledge of the basic parts and safe handling of bows, arrows and firearms, and explain the legal responsibilities of the sports person.

Module Parameters: Access to an outdoor wilderness environment and relevant government agencies.

Teacher must be a registered Alberta Conservation and Hunter Education Program Instructor (Alberta Environmental Protection, Natural Resources Service).

Instruction on firearm handling and safety to be provided by person(s) having successfully completed the Canadian Firearms Safety Course (Alberta Justice, Provincial Firearms Program).

Because of the sensitive nature of topics included in this module, a school board motion and parental consent is required prior to module delivery.

Note: Alberta Conservation and Hunter Education Program Student Certificates may be awarded to students who successfully complete Hunting & Game Management 1 and 2, and receive at least 80% on the Alberta Conservation and Hunter Education Examination.

See Section C (Planning for Instruction) and Section H (Linkages/Transitions) of this Guide for further information on instructor training and certification.

Supporting Module: CTR1210 Personal Safety (Management) [Career Transitions Strand]

Because of the practical nature of this module, students must have a general knowledge of basic first-aid and survival techniques relevant to wilderness environments. See Planning for Instruction in Section C for further information on student safety.

MODULE WLD2070: HUNTING & GAME MANAGEMENT 2 (FIELD TECHNIQUES/REGULATIONS) (continued)

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • demonstrate knowledge of the basic parts and safe handling of bows, arrows and firearms • describe techniques for targeting, handling and dressing game animals in the field • explain personal and legal responsibilities of the sports person 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • under the supervision of a qualified instructor, demonstrating practical knowledge of: <ul style="list-style-type: none"> – the basic parts of bows, arrows and firearms – safe handling techniques for bows, arrows and firearms. <p><i>Assessment Tool</i> <i>Task Checklist: Bows, Arrows and Firearms, WLD2070–1</i> <i>Lab Assessment: Outdoor Experiences, WLDLAB</i></p> <p><i>Standard</i> <i>Achieve a performance rating of 3 in <u>all areas</u> on the task checklist and <u>applicable areas</u> of lab assessment</i></p> <ul style="list-style-type: none"> • under the supervision of a qualified instructor, demonstrating (or explaining) practical field techniques for: <ul style="list-style-type: none"> – maintaining visual acuity and physical fitness – safe and accurate targeting – handling and dressing game animals. <p><i>Assessment Tool</i> <i>Task Checklist: Field Techniques, WLD2070–2</i> <i>Lab Assessment: Outdoor Experiences, WLDLAB</i></p> <p><i>Standard</i></p> <ul style="list-style-type: none"> – Achieve a performance rating of: – 2 in visual acuity/physical fitness – 3 in targeting – 2 in handling/dressing game animals – 3 in applicable areas of lab assessment <ul style="list-style-type: none"> • completing a research project on laws and regulations that: <ul style="list-style-type: none"> – protect life and property – protect and conserve wildlife – govern behaviour of the sports person. <p><i>Assessment Tool</i> <i>Research Process: Personal and Legal Responsibilities, WLD2070–3</i></p> <p><i>Standard</i> <i>Complete all components of research to a standard of 2 on the rating scale</i></p>	<p>50</p> <p>20</p> <p>30</p>

MODULE WLD2070: HUNTING & GAME MANAGEMENT 2 (FIELD TECHNIQUES/REGULATIONS) (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> demonstrate basic competencies 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> a summative theory test for the module in which the student demonstrates knowledge of the basic parts and safe handling techniques for bows, arrows and firearms, and personal and legal responsibilities of the sports person. <p><i>Assessment Tool</i> <i>Sample Test Items: Alberta Conservation and Hunter Education Program, Natural Resources Service (Alberta Fish and Wildlife)</i></p> <p><i>Standard</i> <i>Response indicating 80% mastery</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tools</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

Concept	Specific Learner Expectations	Notes
<p>Bows, Arrows and Firearms</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> describe the design and construction of bows, arrows and accessories demonstrate safe practices for bow handling and use demonstrate appropriate techniques for the care and maintenance of archery equipment demonstrate the fundamental techniques of bow shooting 	<p>Student safety must be a prime consideration in selecting learning activities within this module.</p> <p>See <i>Alberta Conservation and Hunter Education Manual</i>.</p> <p>Contact any district Natural Resources Service (Fish and Wildlife) Office regarding instructor training workshops.</p>

MODULE WLD2070: HUNTING & GAME MANAGEMENT 2 (FIELD TECHNIQUES/REGULATIONS) (continued)

Concept	Specific Learner Expectations	Notes
<p>Bows, Arrows and Firearms (continued)</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain the design, structure and operation of firearms; e.g.: <ul style="list-style-type: none"> – basic parts and their operation – types of action – function of sights • describe the basic components of rifle and shotgun ammunition • explain appropriate techniques for the care and maintenance of firearms • explain the basic practices of safe rifle and shotgun handling • explain techniques for safe loading and sighting-in a firearm • explain appropriate range procedure for recreational shooting activities • explain safe handling practices for firearms and ammunition in the range, classroom and field. 	<p>Stance, grip, aim, release, follow-through.</p> <p>Contact Alberta Hunter Education Film Library.</p> <p>Appropriate instructor training and certification is essential.</p> <p>Obtain <i>Firearms in Canada: A Simple Guide for Canadian Gun Owners</i> (current edition) for information on relevant firearms legislation in Canada.</p> <p>Stance, mount, aim, trigger control, breath control, follow-through.</p> <p>Plinking, novelty shooting, regulation shooting.</p>
<p>Field Techniques</p>	<ul style="list-style-type: none"> • describe visual abilities that are important to the sportsperson; e.g.: <ul style="list-style-type: none"> – distance and nearpoint vision – depth perception – peripheral vision – colour vision • identify factors that may affect visual perception and strategies for improving vision in outdoor environments • explain the role of physical conditioning in safe and comfortable outdoor experiences 	<p>Subscribe to <i>The Alberta Game Warden</i>.</p> <p>Individual/small group research.</p> <p>See <i>Alberta Conservation and Hunter Education Manual</i> (Vision and Physical Fitness).</p> <p>Conduct stretching and endurance activities. Have students assess their own capacity for sustained activity</p>

MODULE WLD2070: HUNTING & GAME MANAGEMENT 2 (FIELD TECHNIQUES/REGULATIONS) (continued)

Concept	Specific Learner Expectations	Notes
Field Techniques (continued)	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify vital target areas on game animals; e.g.: <ul style="list-style-type: none"> – big game – bird game • explain techniques for handling trophy and non-trophy animals in the field; e.g.: <ul style="list-style-type: none"> – dressing, skinning and plucking – hanging and cooling – preserving hide – transporting. 	<p>Consider the use of:</p> <ul style="list-style-type: none"> • videos • 3-D targets. <p>Emphasis on field experiences.</p> <p>See <i>Alberta Conservation and Hunter Education Manual</i>. Loan the video on <i>Field Dressing</i> from your local Natural Resources Service (Fish and Wildlife) Office.</p>
Personal and Legal Responsibilities	<ul style="list-style-type: none"> • explain the legal process, and government agencies in place, to create, change and enforce laws that influence practices of the sports person • identify federal, provincial and municipal laws and regulations that are relevant to a sports person in Alberta; e.g.: <ul style="list-style-type: none"> – laws that protect life and property – laws that protect and conserve wildlife – laws that govern behaviour of the sports person • interpret specific laws and/or regulations regarding trespassing, access to public and private land, use of firearms and bow hunting • explain responsibilities and procedures to report violations of the law and biological data to appropriate officials. 	<p>Invite resource person from a legal profession.</p> <p>Panel discussions and student debates.</p> <p>Oral presentations.</p> <p>Current sources of information include:</p> <ul style="list-style-type: none"> • <i>Alberta Wildlife Act</i> • <i>Alberta Game Warden</i> • <i>Alberta Hunting Regulations</i>. <p>Encourage students to consider the views of divergent interest groups. Conduct a “mock” tribunal or court case (e.g., a coyote and/or individual on trial).</p>

MODULE WLD2090: ISSUES IN WILDLIFE 1 (RESEARCH & ANALYSIS)**Level:** Intermediate**Theme:** Management and Conservation**Prerequisite:** None**Module Description:** Students examine a range of Canadian and global wildlife issues, and present the results of research on one or more issues concerning wildlife in Canada.**Module Parameters:** Access to relevant government and community resources.**Curriculum and Assessment Standards**

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> identify a range of Canadian and global wildlife issues 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> summarizing a range of current wildlife issues significant in Alberta, Canada and the global context. Each summary to address: <ul style="list-style-type: none"> a description of the issue and related positions/stakeholders factors responsible for creating the issue major consequences to humans and wildlife actions being taken to resolve the issue. <p><i>Assessment Tool</i> <i>Criteria for Summarizing Wildlife Issues, WLD2090–1</i> <i>Sample Wildlife Issues, WLD2090–2</i></p> <p><i>Standard</i> <i>Summarize five issues to a standard of 2 on the rating scale</i></p>	40
<ul style="list-style-type: none"> describe alternatives and consequences associated with one or more issues concerning wildlife in Canada 	<ul style="list-style-type: none"> completing a research project on one local or national wildlife issue. Research to address: <ul style="list-style-type: none"> an explanation of the issue and stakeholders involved a survey of different viewpoints regarding the issue a statement of personal position regarding the issue and rationale for the position taken reference to a related wildlife issue in another part of the world. <p><i>Assessment Tool</i> <i>Research Process: Issues in Wildlife, WLD2090–3</i></p> <p><i>Standard</i> <i>Complete research to a standard of 2 on the rating scale</i></p>	60

MODULE WLD2090: ISSUES IN WILDLIFE 1 (RESEARCH & ANALYSIS) (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tools</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

Concept	Specific Learner Expectations	Notes
<p>Issues in Wildlife</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> identify a range of wildlife issues within each of the following categories: <ul style="list-style-type: none"> loss and degradation of habitat subsistence and commercial trade preservation versus conservation infer the impact of each of the issues on wildlife, humans and the environment explain different philosophies, ethics and alternatives regarding each of the issues. 	<p>Subscribe to <i>Update</i> (a magazine for environmental educators published by FEESA).</p> <p>Conduct a review of magazine articles that focus on local or Canadian wildlife issues (e.g., <i>Equinox</i>, <i>The Alberta Game Warden</i>).</p>
<p>Wildlife Research</p>	<ul style="list-style-type: none"> research a significant wildlife issue in Canada; e.g.: <ul style="list-style-type: none"> identify key elements and stakeholders distinguish among facts, opinions and beliefs consider implications and consequences describe different alternatives with respect to the issue, and potential strategies for resolving the issue explain and defend a position with respect to the issue based on the evidence gathered compare the wildlife issue with similar issues in other parts of the world compare the goals and achievements of one or more wildlife conservation groups with respect to the issue. 	<p>See research strategies outlined in "Focus on Research."</p> <p>Create a scrapbook containing articles on local and international wildlife issues.</p>