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# FORESTRY

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## B. STRAND RATIONALE AND PHILOSOPHY

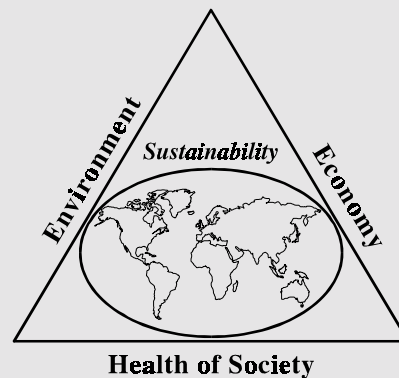
Forests are a source of natural wealth and cover almost two-thirds of Alberta. The resources found on or beneath these public lands contribute to our economy and quality of life. Forested lands in Alberta and Canada provide wildlife habitats, vital watersheds, grazing lands, outdoor recreation and tourism opportunities, and support the development of the forest products industry.

Achieving harmony among the diverse and sometimes competing needs associated with forested lands is an important and continuing task. Through public involvement and a team approach, integrated resource management provides a process for achieving balanced use of forest resources.

Recently, global levels of public concern for forests has expanded to embrace practices that ensure sustainable use of forest ecosystems. Such sustainable use of resources and the environment today will not damage prospects for their continued use by future generations.★

Forestry, a strand in Career and Technology Studies, will provide opportunities for students to examine the dynamics of forest ecosystems, as well as the many benefits and opportunities associated with forests. Conservation is viewed throughout this strand as a process for managing human use of the forest environment to ensure such use is sustainable. Students will develop practical knowledge of industry practices that support the

integrated and sustainable development of forest resources.



Students in Forestry will develop the knowledge, skills, attitudes, motivation and commitment to work individually and collectively, as private citizens and members of the work force, toward the conservation and responsible use of water, land, air, forests and wildlife. Within the philosophy of Career and Technology Studies, *students* in Forestry will:

- develop greater awareness of the economic, environmental and social significance of the forest resource in Alberta and the rest of the world, and the benefits and costs of resource development

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★ Parks Canada and the Canadian Wildlife Service. *The Nature of Canada: A Primer on Spaces and Species*. Ottawa, ON: Environment Canada, 1993.

- describe relationships among production, processing and marketing systems within the forest products industry
- describe technologies and research programs designed to develop, conserve, protect, enhance and sustain the productivity of forested lands
- translate sustainable development and conservation goals into viable plans for managing use of the forest resource
- develop competencies and behaviours that have broad application to environmental career paths, and specific application to careers within Alberta's forest industries.

## STRAND ORGANIZATION

### DEVELOPMENT MODEL

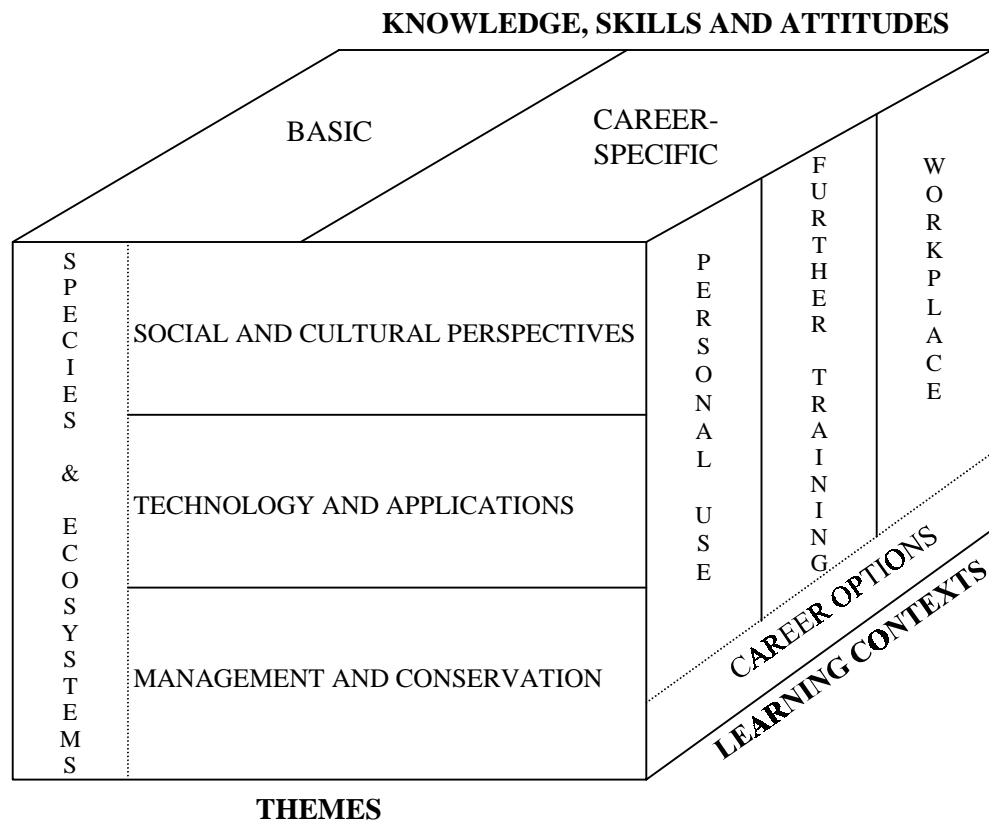
The development model depicts three dimensions that provide a basis for selecting and organizing content within the Forestry strand.

- The **KNOWLEDGE, SKILLS AND ATTITUDES**, represented on the upper face of the model, provide structure for the course and focus attention on learning goals common to all CTS courses.
- The **LEARNING CONTEXTS**, represented on the right face of the model, foster the development of knowledge and behaviours that will enable students to meet the demands of daily living, further training and the workplace.

- The **THEMES** provide situational and concrete learning experiences that support the development of knowledge, skills and attitudes relevant to each of the learning contexts. Each theme focuses attention on the sustainable use of species and ecosystems. Blended together, the themes enable students to understand how it is possible to fulfill social, cultural, aesthetic and economic goals through resource development, while embracing a conservation ethic so as to maintain essential ecological process, genetic diversity and an adequate resource base for future generations.

### LEVELS

Forestry, like other Career and Technology Studies curricula, is organized into three levels of learning: introductory, intermediate and advanced.



Introductory courses enable students to develop basic knowledge of forest regions and ecosystems, and skills necessary for functioning in a forest environment.

Intermediate and advanced level courses develop more specialized knowledge of silviculture practices, and the harvest, processing and marketing of forest products. Students examine forest management policies and programs, and begin to plan for the sustainable development of forested lands.