

Uberta Environmental Protection

## The Science of Special Places

Special Places is a made-in-Alberta strategy to complete a network of protected areas representing the environmental diversity of the province. Special Places balances its primary goal of preservation with the goals of outdoor recreation, heritage appreciation and tourism/economic development.

The Alberta government uses a systematic, science-based framework that includes a Natural Region, Subregion and Natural History Theme Classification System to evaluate the province's environmental diversity. This classification system is also used to compare candidate areas with existing protected areas in the context of provincial targets. The comparison will help ensure Special Places achieves the right balance in protecting our natural diversity.

#### **Natural Regions**

The framework begins by describing the big picture — natural regions. Natural regions are large landscape patterns with similar climate, landforms, soils and vegetation. Alberta's six natural regions are Grassland, Parkland, Foothills, Boreal Forest, Rocky Mountain and Canadian Shield.

### **Subregions**

The next step is subdividing natural regions into subregions based on characteristic vegetation, geology, landform and soil. There are 20 subregions in Alberta.

#### **Natural History Themes**

Once natural regions and subregions are identified, the classification system considers three levels of Natural

History Themes. Level 1 Themes are broad landform types, such as a sandy upland dune field, which can be readily measured from existing sources of information such as maps and aerial photographs. One hundred sixty-six of these significant and highly visible landforms have been identified for Alberta. Level 2 Themes refer to coarse habitat/vegetation types, such as a spruce bog within a Level 1 Theme-type of organic wetland. Level 3 Themes identify specific plant communities, geological features or individual plant or animal species.

#### **Gap Analysis**

In the Special Places process, approximate preservation targets have been set for each Level 1 Theme. These targets are based on the information provided by the Level 1 Theme classification and a general understanding of the plants and wildlife occurring on each of the different landforms.

Each of Alberta's existing protected areas was evaluated to find what proportion of the Level 1 Themes was already captured. The difference between the targets and what is already protected makes up the "gaps." Special Places will fill the gaps in each Natural Region by adding protected areas to the existing network.

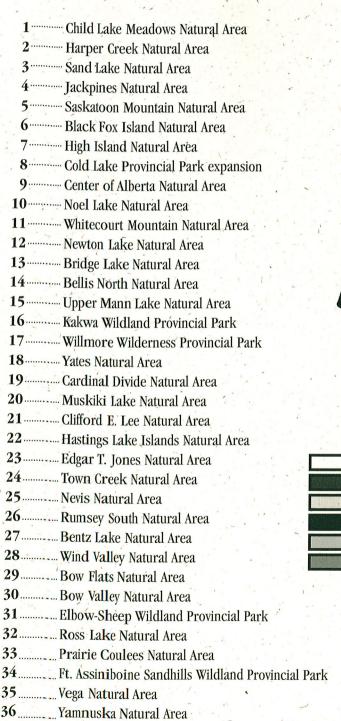
Other variables that help identify specific candidate sites include habitat requirements for wildlife, viability of ecosystems, effect of surrounding developments, linkages between sites and the diversity of biological resources.

Since the inception of Special Places, 34 new areas have been designated and the Willmore Wilderness Act amended to prohibit industrial development in the million-acre Park. Recent amendments to the Provincial Parks Act

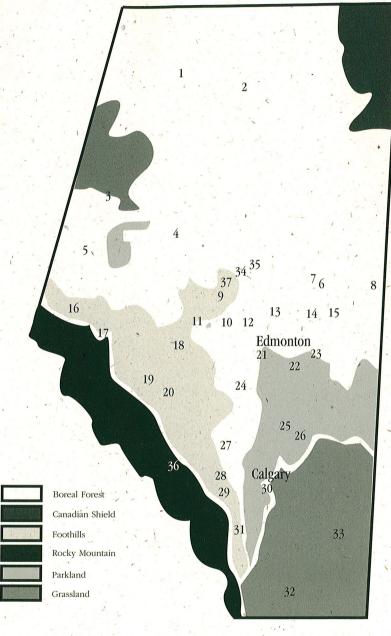


preclude new industrial development within the boundaries of wildland parks such as Elbow-Sheep and Kakwa, strengthening the preservation component of Special Places. Region by region, the Provincial Coordinating Committee for the program continues to review nominations from Albertans to determine the best way to fill the gaps in our province's network of protected areas.

# Special Places Designated Since March 1995



37 ...... Holmes Crossing Sandhills Ecological Reserve



The vision for Special Places is to complete a network of protected areas representing the environmental diversity of the province's six Natural Regions (20 subregions) by the end of 1998.