

NOMINATION TO THE WORLD HERITAGE LIST

Convention concerning the Protection of the World Cultural and Natural Heritage

Name: CANADIAN ROCKIES

Identification No: 304

Date received by WH Secretariat: 23.12.83

Contracting State Party having submitted the nomination of the property in accordance with the Convention: CANADA

Summary prepared by IUCN (March 1984) based on the original nomination submitted by Canada. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

1. LOCATION: Provinces of Alberta and British Columbia, Canada.

2. JURIDICAL DATA:

Owned by Government of Canada, legally administered by Parks Canada under the National Parks Act. A small area of what was to become Banff national park was established in 1885. To this reserve of 26 sq km around the Hot Springs at Banff additional lands were added to give its present size of 6641 sq km. Yoho National Park was added in 1886 and is now 1313 sq km in size. Park initiatives in Jasper began in 1907 and today the park is 10,878 sq km. Kootenay Park was added in 1930 and its present size is 1378 sq km.

3. IDENTIFICATION:

The property consists of four contiguous national parks -- Banff, Jasper, Kootenay and Yoho. Total size is 20,210 sq km. Together, these four parks comprise within their boundaries the most outstanding natural features of the Rocky Mountain Biogeographical Province of North America. The area is extremely rugged, largely unmodified by man and mountainous with many peaks above 4000 m and local relief up to 2135 m. Geological formations are composed of highly faulted, folded and uplifted sedimentary rocks. All four geological divisions of the Rocky Mountain chain are represented in the parks. There are several icefields and hundreds of remnant valley glaciers. Glacial lakes, numerous waterfalls, extensive limestone cave systems, fossil beds, deeply incised canyons, hot springs, and underground rivers are other physical features. The four parks are aligned along the continental divide which marks the hydrographic apex of North America separating the drainage basins of the Arctic, Pacific, and Atlantic oceans.

The area has a continental climate of the western interior of North America with long, cold winters and short, cool summers. Major air masses affecting the area originate in the Pacific and in the Arctic. Mountain topography has strong effects on microclimate. January and July mean daily temperatures are -12.7°C and 15.6°C respectively. Mean annual total precipitation varies from 380 mm at lower elevations to 1250 mm in areas along the continental divide.

Three vegetation zones occur depending on altitude -- montane, subalpine, and alpine. Included are wetlands, dune areas, extensive coniferous forests and alpine meadows. About one third of the total area is unvegetated exposed rock, colluvial material, glaciers and permanent snowfields.

Wildlife resources are typical of the Rocky Mountains and include 56 species of mammals, 280 species of birds and 8 species of amphibians and reptiles. A population estimate of 200 grizzly bears still remain. One species is listed as "vulnerable" in the IUCN Red Data Book, the grey wolf.

Historical use by North American Indians occurred in isolated locations from 10,000 B.C. European exploration began with the fur trade era in the 1800s and rapidly expanded during construction of intercontinental transportation through the area. In 1885 a park reserve was established near the Hot Springs in Banff which became Rocky Mountains Park in 1887.

Access and facility development in the form of railways, transcontinental 4-lane highways, townsites, and alpine ski areas allow some 9 million visitors annually to use the area. Some 10,000 people reside permanently in the two townsites of Banff and Jasper. Eight provincial parks and wilderness areas act as buffer zones to the Federal lands.

#### 4. STATE OF PRESERVATION/CONSERVATION:

Mineral and forest exploitation and hunting was allowed in the area prior to World War I and one hydro development thereafter. Resource extraction since then has been limited to occasional culling of excess herbivore populations and removal of some timber.

Although tourism and transportation facilities are well developed, some 90% of the total property remains as undisturbed wildland with access only by foot or by horseback. Development projects are subject to the Federal Environmental Review Assessment Process which has conducted impact statements of road and railway construction projects.

The four parks together comprise a contiguous unit and although each has a separate administration they are coordinated through a regional office. A management plan for each park is in preparation and will be completed in 1985. In total the four parks have 750 man-years of personnel and US \$17 million allocated to them.

#### 5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST:

The Canadian Rockies nomination, as presented by the Government of Canada, provides the following justification for designation as a World Heritage property:

- a) Cultural property -- not applicable
- b) Natural property
  - (i) Earth's evolutionary history. The area incorporates the Burgess Shale which was declared a World Heritage Site in 1981 and is considered as one of the world's most significant fossil sites.
  - (ii) On-going geological processes. The site includes the full range of features and processes relating to glaciation -- icefields, cirque glaciers, moraines, hanging valleys, striations, and pioneer stages of plant succession.
  - (iii) Exceptional natural beauty. The Canadian Rockies landscape is known for its scenic values and attracts millions of visitors for this reason.
  - (iv) Habitats of rare and endangered species. Diverse vegetation and undisturbed habitats support wildlife typical to the region. One vulnerable species occurs.

1. DOCUMENTATION

- i) Nomination form and map
- ii) IUCN Data Sheets for Banff, Jasper, Kootenay and Yoho National Parks
- iii) Consultations: Dr. V. Geist, Dr. J. Marsh
- iv) Literature Consulted: numerous references as cited in data sheets.

2. COMPARISON WITH OTHER AREAS

The property includes the largest complex of national parks in any one area of the Rocky Mountains Biogeographical Province of North America. The combination of natural features and superlative scenery that are contained within this complex are unsurpassed anywhere in the Province. Several features of particular significance are found nowhere else (the Burgess Shales, Castleguard Caves, Columbia Icefield, and the Maligne Valley). Historically, the site includes the area at Banff that was Canada's first national park. The area differs greatly from the other World Heritage Site in the Rocky Mountain region, Yellowstone National Park, which is basically a volcanic plateau containing many thermal features. Other comparable areas are found in the mountain blocks of the northern interior of British Columbia but none have the collection of values found within the nominated site and none have the measure of protection afforded by national park status.

3. INTEGRITY

The area contains the headwaters of major river systems and, combined with its large size, associated provincial park buffer zones, and diversity of habitats, maintains a high measure of ecological integrity. The political boundaries are firm and unlikely to be modified.

Some winter range grazing land outside the eastern margin of the area is used by ungulate populations in the park. Although sport hunting of these animals on their winter range takes place, this is not a serious depleting factor. More serious are periodic poisoning programmes carried out by local ranchers which have reduced wolf populations as well as other non-target species. Adjacent to the western margins of the area major forestry and hydro-developments are in process which are providing increased human access to some of the wilderness zones of the parks.

Inside the boundary of the parks there are a number of localized sites that have been significantly modified for tourism or transportation purposes. These are contained within defined intensive use development zones and are subject to elaborate environmental assessments. Over 90 percent of the site remains as undisturbed natural wildland.

4. ADDITIONAL COMMENTS

- a) Inclusion of Burgess Shale Site. This small specific feature is included within the nominated area although it was included on the World Heritage List in 1980. The site itself is a very limited area within Yoho National Park and is only one of many natural features of the Canadian Rockies nomination.

- b) Comprehensiveness of nomination. Although the nominated site is of substantial size (only four existing World Heritage Sites are larger), it should be noted that only Federal national park land is included. Several of the most outstanding features of the Canadian Rockies (e.g., Mt. Robson, Mt. Assiniboine, Kananaskis, Fortress and Cummins Lakes, and a large portion of the Columbia Icefield), lie in provincial lands immediately adjacent to the national parks.

Although Parks Canada contacted the Provincial authorities, no consideration of these additional inclusions was made. Consequently several of the most outstanding features of the Canadian Rockies are missing in the nomination.

#### 5. EVALUATION

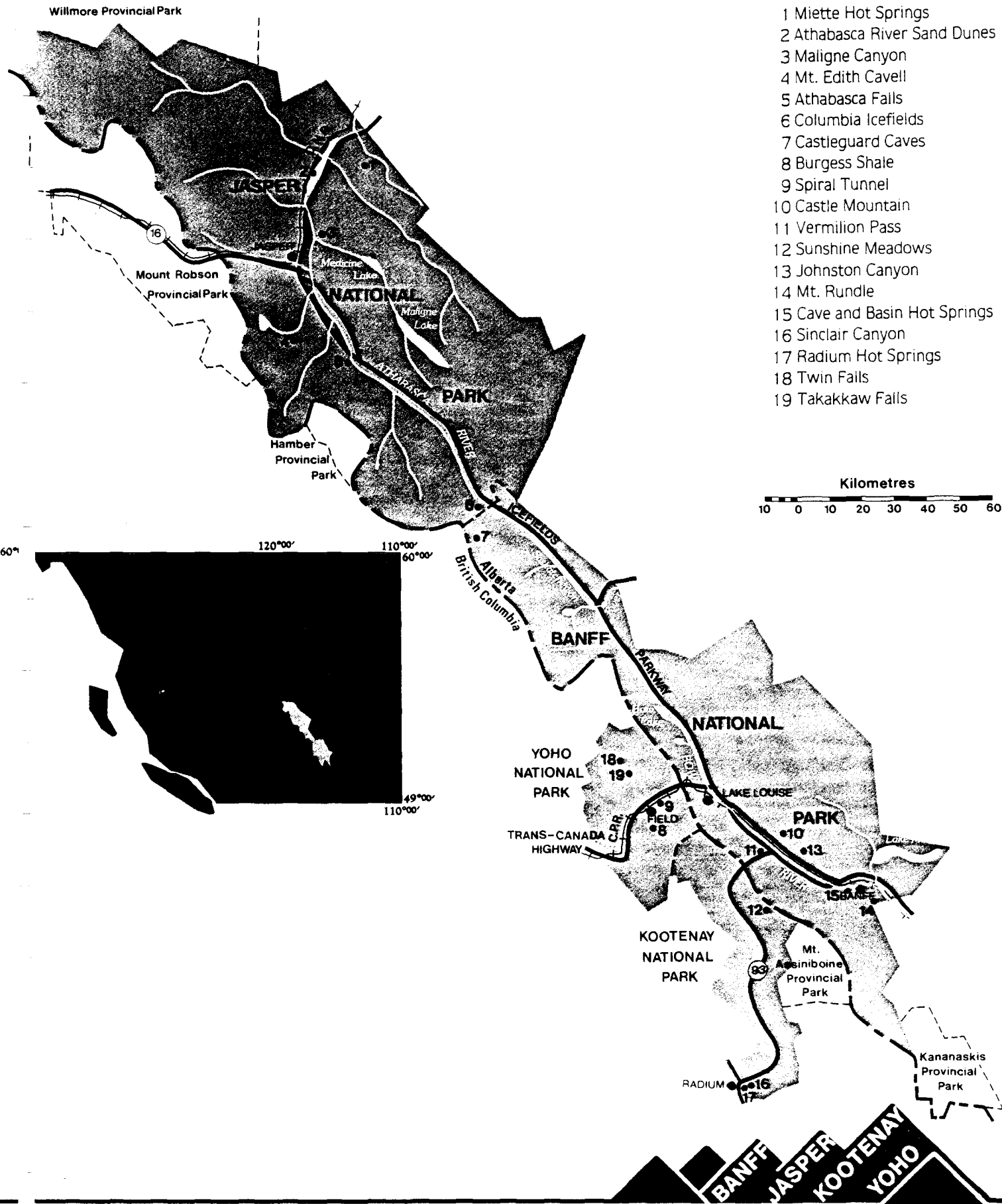
The Canadian Rockies nomination, including the four contiguous national parks, contains the majority of the outstanding physical and biological features of the Rocky Mountain Biogeographical Province. Classic illustrations of glacial geological processes (criteria ii) are found here as well as exceptional natural beauty (criteria iii). As the Burgess Shale fossil site is part of the area it also meets criteria (i). Management plans for each park are now being drafted and the total area is under an effective management regime.

#### 6. RECOMMENDATION

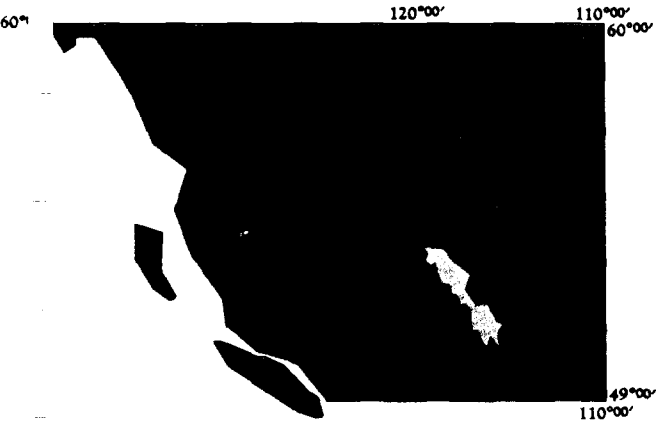
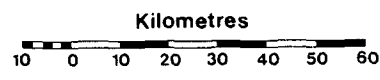
The site meets three criteria for World Heritage recognition and should be added to the List. The Committee may wish to urge the Canadian authorities to consider adding several of the adjacent outstanding provincial lands to the site, such as those mentioned in 4(b) above. IUCN further recommends that, if the nomination is approved, the Burgess Shale Site be incorporated as part of the Canadian Rockies property. This will require an agreement with the Government of Canada on the name of this property, which could read "The Canadian Rockies including the Burgess Shale Site".



THE CANADIAN ROCKIES



- 1 Miette Hot Springs
- 2 Athabasca River Sand Dunes
- 3 Maligne Canyon
- 4 Mt. Edith Cavell
- 5 Athabasca Falls
- 6 Columbia Icefields
- 7 Castleguard Caves
- 8 Burgess Shale
- 9 Spiral Tunnel
- 10 Castle Mountain
- 11 Vermilion Pass
- 12 Sunshine Meadows
- 13 Johnston Canyon
- 14 Mt. Rundle
- 15 Cave and Basin Hot Springs
- 16 Sinclair Canyon
- 17 Radium Hot Springs
- 18 Twin Falls
- 19 Takakkaw Falls



BANFF  
JASPER  
KOOTENAY  
YOHO