

## BIRDS AND THE BRITISH COLUMBIA CONSERVATION DATA CENTRE

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### THE CONSERVATION DATA CENTRE

The British Columbia Conservation Data Centre (CDC) is a centralized, computerized data bank that is designed to provide an objective source of information on rare and endangered plants, animals and plant communities (Cannings 1991). It was begun in 1991 as a joint project of the provincial government (B.C. Environment), the Nature Trust of B.C., the Nature Conservancy of Canada and the Nature Conservancy (U.S.A.), with funding from government, industry and private foundations. It is now fully funded by the provincial government as a program within the Wildlife Branch of the Ministry of Environment, Lands and Parks.

At the heart of the CDC is a complex computer software system of more than 30 inter-related files, designed over the past 20 years by the Nature Conservancy (U.S.A.); paper files and maps also form key components. Five permanent staff and varying numbers of temporary staff gather and interpret the information. The permanent staff members are:

Program Co-ordinator: Andrew Harcombe  
 Zoologist: Syd Cannings  
 Botanist: George Douglas  
 Plant Community Ecologist: currently vacant  
 Data Manager: Sharon Hartwell

The major features of the system are:

- 1) The information is *organized and computerized* for easy access and sorting.
- 2) The work is *focused*. Concentrating primarily on rare and endangered species focuses limited time and resources where they are needed most urgently, making what would have been an impossibly large job (keeping track of everything) feasible. Work is also concentrated on particular taxonomic groups; to date, the CDC is tracking only vertebrates, vascular plants and plant communities. However, priority lists of invertebrates and non-vascular plant (e.g. moss) species have been developed recently and work will begin soon to enter occurrence records of some of these groups.

- 3) It is *ongoing and dynamic*. The data collecting process is a continuous, iterative one. Once the initial data input is relatively complete, the CDC can monitor sites of concern to ensure that the information is both current and relevant.
- 4) It is *networked* with 80 other similar centres throughout North, Central and South America, all of which use the same computer software and methodology to assess status and organize data. For example, we can review the global status of the White-headed Woodpecker<sup>1</sup> by asking the Nature Conservancy's central database to report on state and provincial ranks throughout its range.

### ACTIVITIES AND FUNCTIONS OF THE CDC

Simply put, we ask and attempt to answer the following questions:

- 1) **What are the rare and endangered plants, animals, and ecosystems of British Columbia?**

Our first task is to assign every species and ecosystem (plant community) a rank from 1 (rarest or most threatened) to 5 (not currently of conservation concern), based on an objective set of criteria established by the Nature Conservancy (Appendix 1; Harcombe 1994). These elements of biological diversity (species, communities, etc.) are ranked both provincially and globally so that their conservation priority can be represented clearly and accurately. Elements with provincial ranks from 1-3 are considered endangered, threatened or rare and are therefore "tracked" by the CDC. For animals, species with provincial ranks of 1 or 2 are placed on the provincial Red List of potentially endangered or threatened species, and those with a rank of 3 are put on the Blue List of potentially vulnerable species (Harper *et al.* 1994).

Over the past couple of decades, several lists and ranking systems that attempt to highlight species of

[<sup>1</sup> Scientific names of ranked bird species are listed in Table 1.]

















