

From North Cascades

Wildlife observations reported by employees and visitors provide valuable information on the distribution and relative density of various species, thus supplementing field studies by the park biological staff. Data are recorded on Natural History Field Observation cards (Form 10-257). Despite North Cascades NP Service Complex's relatively short existence (since late 1968), already we have accumulated several thousand completed cards. These are distributed among 48 mammal, 155 bird, 7 reptile, 7 amphibian, and 9 fish species.

Natural History Field Observation cards are stored alphabetically by species and class in file cabinets at North Cascades park complex headquarters. Although this data-storage system is adequate for re-

* Bits per second (indicates rate of transmission)

trieval by species or class, cross-referencing by other variables such as location and habitat-type is not possible.

A strong need for a multi-variate wildlife data-retrieval system became apparent both from internal park-management needs and from numerous requests by universities, corporations, and private individuals. The recent acquisition of two Datapoint computers and a programmer (Robert Borreu) facilitated development of a new system.

The new system permits retrieval by species, class, county, topographic quadrangle map, Universal Transverse Mercator coordinates, elevation, precision (confirmed or unconfirmed), date, and observer. Figure 1 shows an example of the printout. For most variables, ranges of values also can be selected. Although few habitat data can be directly retrieved from the cards, approximations are possible. For example, most observations in old-growth west-

ern hemlock — western red cedar forests could be retrieved by selecting elevations below 1200 meters and Universal Transverse Mercator coordinates less than 650000E. It may be possible to more directly document habitat-type in 1984, when vegetation mapping for the park complex is completed.

Presently this system contains information on 12 mammal and 22 bird species that are endangered, rare, or unusual in our area. We do not anticipate putting data on the more common species in the computer in the near future.

Printouts can readily be sent by mail in response to requests originating outside the park complex.

This new use of the computer has dramatically improved retrieval of data on wildlife distribution and relative density in the North Cascades park complex, and could serve as a model for systems in other park service areas.

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Figure 1. Example of computer printout of wildlife-observation data.

NATIONAL PARK SERVICE WILDLIFE OBSERVATIONS
NORTH CASCADES NATIONAL PARK SERVICE COMPLEX AND ENVIRONS 1965 - 1983
SORTED BY: COMMON NAME AND INDEX NUMBER

DEERJ02	NAME: WHITE PELICAN	- PELECANUS ERYTHORHYNCHOS	UNIVERSAL TRANSVERSE MERCATOR: N5395000E64000
	NAME OF AREA: ROSS LAKE NRA		QUADNAME: ROSS DAM
	OBSERVER: T FLEISCHNER (NPS)		COUNTY: WHATCOM
	DATE OF SIGHTING: 08/30/1982		ELEVATION IN METERS: 370
	CONFIRMED BY BIO. STAFF? Y		QUADCODE: 4812116
	GENERAL DESCRIPTION: ONE SOARING AND CIRCLING UPWARD ABOVE THUNDER ARM OF DIABLO LK. AT COLONIAL CRK. CAMPGROUND.		
GULU001	NAME: WOLVERINE	- GULO LUSCUS	UNIVERSAL TRANSVERSE MERCATOR: N5406000E606000
	NAME OF AREA: NORTH CASCADES NP		QUADNAME: MT. SHUSKAN
	OBSERVER: G DOUGLAS		COUNTY: WHATCOM
	DATE OF SIGHTING: 1965		ELEVATION IN METERS: 1300
	CONFIRMED BY BIO. STAFF? N		QUADCODE: 4812102
	GENERAL DESCRIPTION: ONE INDIVIDUAL SEEN NEAR NPS BOUNDARY SE OF MT. SHUSKAN.		
GULU002	NAME: WOLVERINE	- GULO LUSCUS	UNIVERSAL TRANSVERSE MERCATOR: N5417000E611000
	NAME OF AREA: NORTH CASCADES NP		QUADNAME: MT. CHALLENGER
	OBSERVER: A LIEN (TRAIL CONTRACTOR)		COUNTY: WHATCOM
	DATE OF SIGHTING: 07/27/1970		ELEVATION IN METERS: 1650
	CONFIRMED BY BIO. STAFF? N		QUADCODE: 4812103
	GENERAL DESCRIPTION: SEEN AT CLOSE RANGE WALKING SLOWLY DOWN TOWARDS ZOG LK.		