Third Creek Waterfowl Study John W. Huckabee University of Wyoming Project Number 131

The marshes of the Third Creek area in Grand Teton National Park have been occupied by a wide variety of waterfowl. The objectives of this study were (1) determine the extent of waterfowl utilization and production, and (2) to determine what major factors influence the nature of existing waterfowl populations.

The study area encompasses an area of approximately seven square miles. Two permanent streams, Second Creek and Third Creek, and Swan Lake lie within the area. Numerous beaver dams on both streams have provided natural water impoundments of variable sizes. The study area is largely a mosaic of willow, grass and sedge bounded by Jackson Lake on the south, coniferous forests of spruce-fir (<u>Picea - Abies</u>) and lodgepole pine (<u>Pinus contorta</u>) on the west and north with some aspen (<u>Populus tremuloides</u>) and cottonwood (<u>Populus</u>) on the northeast. Second Creek forms the eastern boundary of the unit.

Preliminary examination of census data indicates that the mallard (<u>Anas platyrhynchos</u>) was the most abundant species throughout the study period. The green-winged teal (<u>Anas carolinensis</u>) was a close second. During the short migration periods the numbers of gadwall (<u>Anas strepera</u>) and the American merganser (<u>Mergus merganser</u>) did exceed the mallard and green-winged teal.

The ring-necked duck (<u>Aythya collaris</u>) was the most abundant diving duck throughout the study period. A large concentration of migratory drakes was observed using Swan Lake in October.

Information on breeding activity, molt, behavior, and predation is currently being tabulated and will be included in the thesis publication.

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