

# DISTRIBUTION, ABUNDANCE AND COMPOSITION OF HARLEQUIN DUCKS IN PRINCE WILLIAM SOUND, ALASKA

PETRULA, MICHAEL J. Alaska Department of Fish and Game, 333 Raspberry Rd., Anchorage, Alaska 99518.

We conducted surveys of harlequin ducks (*Histrionicus histrionicus*) inhabiting oiled areas in western Prince William Sound (WPWS) and non-oiled areas in eastern PWS (EPWS) to compare trends in numbers and levels of productivity between locations. We used the number of breeding pairs, age and sex composition of the population, chronology of molt and the number of brood observations to determine whether similar demographic characteristics exist between locations. The number and composition of harlequin ducks in PWS varied among survey periods because of seasonal movements by ducks in and out of the study area. The general pattern of movements was similar between WPWS and EPWS. However, preliminary results suggest that differences in the magnitude and timing of these movements may represent differences between populations in their potential for growth. The lower proportion of paired females in WPWS coupled with a greater proportion of flightless females earlier in the fall indicates to us that female breeding propensity is lower in WPWS than EPWS. Males comprised a greater proportion of the WPWS population during spring and fall surveys suggesting lower survival rates of females in WPWS. Fourteen harlequin broods were observed in EPWS while no broods were observed in WPWS, however, similar proportions of sub-adult males in WPWS and EPWS indicates that recruitment also results from nesting



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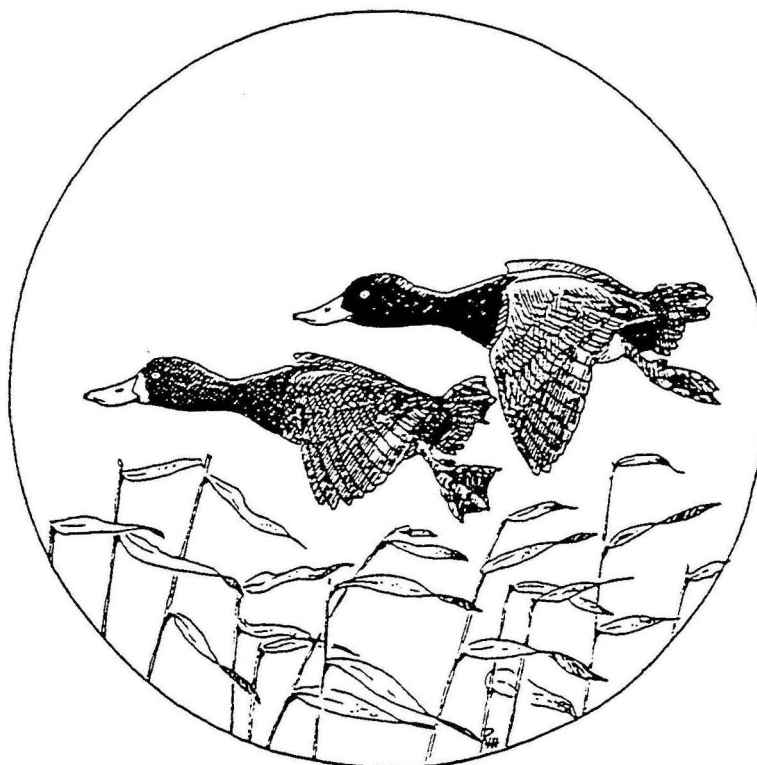
**12-16 February 1997; Baton Rouge, Louisiana**

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