

PRELIMINARY RESULTS OF A FIVE YEAR BANDING STUDY IN EASTERN CANADA: SUPPORT FOR EXPANDING CONSERVATION EFFORTS TO NON-BREEDING SITES?

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An Eastern Canada Piping Plover research program was conducted from 1998-2003, with additional effort expended on recapture in 2004. During this time, 888 Piping Plovers were banded, including 561 young and 327 adults. Individuals were banded with province-specific color bands, many bearing alpha codes to permit visual identification. Of the total banded, 175 were recaptured in subsequent years, including 73 young and 102 adults. Preliminary analysis has been initiated exploring survival, dispersal, metapopulation dynamics, wintering ground and migratory tendencies. There appears to be two discrete groups of Piping Plovers in Eastern Canada – one located in southern Nova Scotia, another located in the southern Gulf of St. Lawrence. There is an indication of limited exchange with the US Atlantic population and the Gulf of St. Lawrence group however the Nova Scotia group appears to be isolated from other populations. Survival rates were calculated for both groups independently. Adult survival rates were approximately 73% for both the southern Gulf of St Lawrence and southern Nova Scotia and are comparable to rates calculated for the US Atlantic population. However, juvenile survival rates were substantially lower with estimates of 24% for the southern Gulf of St. Lawrence and 33% for southern Nova Scotia. The population model also identifies adult survival as the most important factor influencing population trends. Several Eastern Canadian individuals have been positively identified during migration and on the wintering grounds. Migration south from the nesting grounds can occur very early. Several individuals have been observed in migration from early to mid July. High fidelity to wintering areas was reported in several individuals, with plovers remaining in an area during an entire winter and returning to the same site in one or more consecutive years. The preliminary results of our study suggest that there are likely factors acting outside of the nesting grounds that must be considered in order to move towards recovery of the Eastern Canadian population.