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Books - Monitoring Avian Productivity and Survivorship (MAPS) in Mount Revelstoke, Banff, Waterton Lakes and Jasper National Parks (1993-2006)

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the colony indicate that Sandwich Terns breeding there included birds that had hatched both locally and at other European colonies. Catches were increased by using mist-nets, traps and lures at night, starting in 2009. Color bands increased recovery rates and added France to recovery sites. Recoveries in Scotland of birds banded elsewhere included from other U.K. sites, as well as from Belgium, Denmark and Holland.) MKM

Some aspects of the biology of the Black Falcon *Falco subniger*. S.J.S. Debus and J. Olsen. *Corella* 35:29-36. Div. of Zool., Univ. New England, Armidale, New South Wales 2351, Australia (Banding and museum data were combined with field research to compile life history knowledge on this poorly known species. Knowledge on plumage and masses to date are reviewed, with photographs. The only banded nestling recovered to date was found 346 km from the nest-site 11 yr 7 mo after

being banded. Data on three other banding recoveries, all of birds recovered alive about a year after banding, are also presented.) MKM

Breeding season news Orkney 2010. E. Meek. 2011. *Seabird Group Newsletter* 116:8-11. c/o Seabird Group, 10 Broomfield Park, Portlethen, AB12 4XT, UK. (A review of nesting success and failures of several seabird species on numerous Orkney Islands includes banding of 46 European Herring Gull chicks on Burray Ness in 2009 and 52 in 2010 and of 35 Great Black-backed Gulls on Hunda in 2010.) MKM

Note: We welcome Glenn L. Gabanski as our new abstractor for contributions published in *Meadowlark*

GLG = Glenn L. Gabanski

WDS = W.D. "Bill" Laughman

MKM = Martin K. McNicholl

Books

MONITORING AVIAN PRODUCTIVITY AND SURVIVORSHIP (MAPS) IN MOUNT REVELSTOKE, BANFF, WATERTON LAKES AND JASPER NATIONAL PARKS (1993-2006). By C. M. Smith, D. R. Kaschube, B. Sheperd and J. Woods. 2008. Parks Canada unpublished technical report. Waterton Lakes National Park, Waterton Park, Alberta. vii + 59 pp.

This report outlines the purposes and techniques of the MAPS (Monitoring Avian Productivity and Survivorship) project run by the Bird Populations Institute and provides MAPS data from four Canadian mountain National Parks [three in Alberta and one in British Columbia] on survival and population trends of several bird species that breed in these parks, with emphasis on the validity of these data in comparison with data from other types of studies and how they can help assist in conservation efforts in the parks.

The report begins with a detailed two-page executive summary that outlines the objectives of the project, its history to date in the four parks, highlights of findings to date and an assessment of what actions are needed to maximize the accuracy and usefulness of future data. A brief

acknowledgement section lists data collectors at each site, identifies funders and other supporters and highlights the role of Stefan Jungkind as lead bander and banding trainer for three years. An introduction then outlines the history of monitoring landbird populations in Canadian mountain national parks, outlines the history and objectives of MAPS and lists 12 taxa highlighted in this report (11 species and one species pair ["Traill's" Flycatcher when Alder could not be distinguished from Willow in the hand]). A methods section consists of brief descriptions of the four study sites and their operation, with a map showing their locations and one photograph of each, and brief accounts of data collection, data entry with a vigorous verification process, data analysis based on breeding/summer residency status, development of adult population indices and analysis of productivity, method of analysing trends in population size and productivity over several years and from year to year and mark-release-recapture methods of analysing survivorship at each station over several years and at the three longest-running stations combined.

Trends for 14 species for which the authors considered that enough data have been collected to

date to provide insight are discussed, tabulated and graphed. Ten of these species showed statistically significant declines, while four others showed increases. Most of these trends agree with those indicated for Alberta and British Columbia by Breeding Bird Survey data, but some show opposite trends. Pooled trends of productivity for the same 14 species, on the other hand, indicated a highly significant increase, with more (nine species) indicating positive or stable trends and five showing negative trends. Trends at one station (Wishbone in Waterton Lakes National Park), however, were biased by considerable spring snowstorm mortality in the initial year (2002) of the project at that station. Trends for some species also differed among stations. Estimated survival rates of adults from data pooled from three of the stations from 1993-2002 are also compared with trends indicated for 1992-2003 for the Northwestern MAPS region as a whole or with trends indicated for that region's mountain portion.

The results as a whole show clearly how MAPS data can be used not only to assess population trends for each species generally within a given region, but also to measure how different factors may affect these trends over shorter and longer periods. The authors are careful to exclude data from analyses for which data are not yet sufficient and to emphasize the degree of certainty or uncertainty provided by the data collected to date. The cessation of data collection at the Mount Revelstoke sites will unfortunately deprive administrators of one tool in assessing the effectiveness of habitat protection measures there, although other research by graduate students on particular species there will help fill the gaps. The report highlights the importance of using scientific research to monitor wildlife populations to evaluate the effectiveness of measures intended to manage park habitats and retain their natural values and the importance of collecting data for many years to sort short-term fluctuations from long-term trends and the generality of trends from anomalies.

A discussion section consists of three sections comparing population and productivity trends compared with trends indicated by Breeding Bird Survey data, estimated survival rates for adults compared with those for the Northwest MAPS

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region as a whole and possible causes for changes in population, including whether local (breeding grounds) conditions or conditions in wintering areas are likely more influential. A brief conclusion section emphasizes the tentative nature of the findings until data are collected for more years and the importance of habitat preservation (as in national parks) in keeping population levels relatively stable. An appendix lists English and scientific names of all bird species captured.

Errors in this report are restricted primarily to minor "typographical" and grammatical flaws, such as pooled instead of pooled (p10), two split infinitives, a misplaced only, a singular/plural mismatch, a missing word in a table caption and omission of the hyphen in two references cited from *Canadian Field-Naturalist*. Species names in tables and the appendix, however, should have been proof-read more carefully, with Western Wood-Pewee, Pacific-slope Flycatcher, Steller's Jay, *Dumetella*, Clay-colored Sparrow, Slate-colored Junco and both words of *Pheucticus melanocephalus* spelled incorrectly, some repeatedly. Some habitat features, effort details and data from each site or all sites combined are summarized in 12 tables and Figures 6-15, enabling readers to see such details at a glance.

The value of netting and banding generally and the MAPS program specifically in providing data important to conservation efforts is demonstrated strongly by this report. I hope that Parks Canada officials and others in charge of other public lands throughout North America follow its example in using banding efforts to help assess management practices in assessing their effectiveness in helping to retain the habitat and other features important to maintaining healthy populations of the biota that such lands are established to protect.

This report and one on the MAPS project of the Inglewood Bird Sanctuary in Calgary, Alberta are available on the Calgary Bird Banding Society website at <http://www.calgarybbs.org/articles.org>

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