

## II. British Columbia.

### ITEMS OF INTEREST--

- (1) The regional representative of British Columbia has recent communication with Dr. N. Litvinenko from Vladivostok. According to Dr. Litvinenko there are only five Russian ornithologists seriously engaged in seabird work in the Pacific Region. They are:

E. A. Mihtarjyants, who investigates the breeding biology of the Alcidae at the Komandor Islands.

Ju. V. Shibaev, who is interested in the breeding biology of Alcidae of South Primorye and the distribution of seabirds in Primorye and Khabarovsk Region.

A. G. Velizhanin works on seabirds from the Kuril Islands and problems of origin of the insular fauna.

L. V. Phirsova, an ornithologist from Leningrad who collects information on gulls at the Komandor Islands.

M. Litvinenko is interested in the breeding biology, food habits and migration of seabirds in the Peter the Great Bay. There are seabird colonies of Larus crassirostris, Cephus carbo, Uria aalge, Synthliboramphus antiquus, Cerorhinca monocerata, Oceanodroma monorhis, Puffinus leucomelas, Phalacrocorax filamentosus and P. pelagicus in Peter the Great Bay.

- (2) A limited number of bibliographies on the effects of oil pollution on birds and aquatic organisms have recently been reprinted. Copies can be obtained from Kees Vermeer.

The bibliographies are:

R. Vermeer and K. Vermeer. 1974. Oil pollution of birds: an abstracted bibliography. Canadian Wildlife Service. Pesticide Section. Manuscript report 29:1-68.

R. Vermeer and K. Vermeer. 1974. The biological effects of oil pollution on aquatic organisms: A summarized bibliography. Canadian Wildlife Service. Pesticide Section. Manuscript Report 31:1-67.

Kees Vermeer  
Regional Representative  
British Columbia

MARINE BIRD INTEREST IN AUSTRALIA--I am a member of the Australasian Seabird Group, living 100 metres from the shores of the South Pacific in South East Queensland. We came here to retire from the U.K. some 3 years ago and are very active in promoting interest in local ornithology as I have been involved in amateur ornithological field work in the U.K., Europe and on world trips for nearly 40 years. I have made special studies of sea birds and would like to exchange news and views with any of your members who have the time and the inclination to do so--bird movements, local publications, etc. I have detailed notes of sea bird movements off the coast locally--we get very large flocks up to 350,000 of the Short Tailed Shearwater in Nov, and Dec. Also several thousand Fluttering Shearwaters in addition to the usual influx each summer of the waders from Siberia and Mongolia.

Maurice Glasman  
14 Ocean Sound  
Broadbeach Q4217  
Quensland, Australia  
December 1976

#### REGIONAL REPORTS

##### I. Alaska.

The summer of 1976 saw the largest seabird research effort in the history of Alaska. Work was conducted on Forrester Island in extreme southeast Alaska, on the westernmost Aleutian Islands and on the Arctic coast as far east as the border with Canada. Few areas in between these points were missed as ship, boat and aerial censusing as well as site specific work were carried out by a number of investigators. Most of the field research was funded by the Outer Continental Shelf Energy Assessment Program. The preceding issue of the Bulletin contains a listing of the various projects and investigators.

Reports from the field of large scale failure at many breeding colonies and normal to good production at other colonies prompted the OCS program to hold a meeting of all investigators in order to see how differences in nesting success and chronology might be explained. Weather and ice investigators presented information that might explain some of the bird phenomena. A summary of the major findings of the meeting will be included in the next PSG Bulletin.

George J. Divoky  
Regional Representative  
Alaska

#### IV. Oregon.

Apparently there is no active seabird research being conducted on the Oregon coast this year. The Bureau of Sport Fisheries and Wildlife (Oregon Islands Refuge management) conducted their annual aerial survey of the offshore breeding colonies in June. The Corvallis Audubon Society made one pelagic birding trip in August. A group of people from the OSU Marine Science Center and the Oregon Fish Commission Laboratory, Newport Oregon are conducting monthly censuses of the Yaquina Bay Estuary.

ITEMS OF INTEREST--Oregon is presently involved in a major political battle over land use planning. A group of citizens asking for "local control" are attempting to repeal the state's Land Use Planning Laws. If this move is successful, the result will be to return all zoning authority to local governments. On the Oregon coast the likely result is a free hand for the Developers, at least until the state legislature can come up with some other means of frustrating them.

#### V. Northern California.

No significant developments in the area to report. Offshore oil studies will hopefully be funded in 1977, and a major research thrust should begin soon. Hopefully, future developments will warrant a report in the next issue.

David G. Ainley  
Regional Representative  
Northern California

#### VI. Southern California.

CURRENT RESEARCH--University of California, Irvine (Department of Ecology and Evolutionary Biology, Irvine, California)

- (1) A major project is the Bureau of Land Management sponsored baseline study of marine seabirds utilizing the Southern California Bight area. Studies include breeding biology of nesting birds, distribution and seasonality of non-breeders, foraging areas and foods of all species. These studies are designed to identify areas that would be particularly sensitive to oil resource development off southern California.

Breeding species being studied closely are Western Gull, Cassin's Auklet and Xantus' Murrelet. Also investigated, though less intensely, are Brandt's, Double-crested and Pelagic Cormorant, Pigeon Guillemot, Ashy, Leach's, and Black Storm-Petrels. The latter being recorded as a breeder in the United States for the first time this year. Principal investigator: George L. Hunt, Jr., with Ken Briggs and David Lewis (University of California, Santa Cruz) and Steve Speich and Robert Pitman at University of California, Irvine.

- (2) Molly and George Hunt are continuing their study of supernormal clutches and lesbian pairing of Western Gulls on the Channel Islands.

### III. Washington.

#### CURRENT RESEARCH--

- (1) University of Washington (Wildlife Science Group, College of Forest Resources).

##### Completed Studies:

1. Reproductive biology and activity of the Rhinoceros Auklet on Protection Island, Washington. Ulrich W. Wilson (MS thesis, 1977).
2. Breeding biology of the Rhinoceros Auklet on Destruction Island. Lora L. Leschner (MS thesis, 1976).
3. The comparative biology of the Tufted and Horned Puffins in the Barren Islands, Alaska. Michael Amaral (MS thesis, 1977).
4. The breeding ecology of the Fork-tailed Storm Petrel on the Barren Islands, Alaska. Dee Boersma and David A. Manuwal.
5. Habitat utilization and activity patterns of the Parakeet Auklet in subarctic Alaska. David A. Manuwal and Naomi J. Manuwal.

- (2) University of Washington (Department of Zoology)

##### Studies in progress:

Effects of foraging by seabirds on intertidal marine invertebrate populations. John Landahl (Ph.D. thesis).

- (3) University of Puget Sound (Department of Biology)

##### Completed Studies:

Biology of an endangered population of Caspian Terns in Grays Harbor. Steven Penland (MS thesis).

ITEMS OF INTEREST--The Pacific Northwest Bird and Mammal Society held an informal workshop on seabird research and conservation on 26 November 1976 at the British Columbia Provincial Museum. Correspondence regarding the workshop should be directed to: Dr. Kees Vermeer, Canadian Wildlife Service, 5421 Robertson Road, Delta, B. C., V4K 3N2 or Mr. Wayne Cambell, B. C. Provincial Museum, Victoria, B. C. The Pacific Northwest Bird and Mammal Society encourages the publication of seabird research of regional significance in its publication The Murrelet. Manuscripts should be sent to the Editor, Dr. Richard E. Johnson, Department of Zoology, Washington State University, Pullman, WA 99163.

David A. Manuwal  
Regional Representative  
Washington

VII. Mexico. No report received.

Bernardo Villa-Ramirez  
Regional Representative  
Mexico

VIII. Hawaii.

CURRENT RESEARCH--To my knowledge, no new seabird research projects have been initiated in Hawaii since the last report (vol. 3, #1). However, a report of a short physiological study of the Sooty Tern has been published as a Technical Report (#60) of the International Biological Program in Hawaii--"Oxygen Consumption, Evaporative Water Loss and Body Temperature in the Sooty Tern, Sterna fuscata (1975) by Richard E. MacMillen, G. Causey Whittow, Ernest A. Christopher and Roy J. Ebisu. Limited copies of this report may be available through the IBP, Dept. of Botany, University of Hawaii, Honolulu, HI 96822.

CONSERVATION NOTES--Three conservation issues of significance to Hawaiian seabirds were discussed in Vol. 3(1). This report will serve as an update on the earlier information.

- (1) Oahu's offshore islets--Proposed regulation changes for offshore seabird refuges have been delayed by violent opposition of local fishermen to the inclusion of certain islets that are traditional fishing grounds. Compromise proposals, including permitted camping on certain islets, have been suggested, but the fishermen refuse to bend. Fortunately, the most controversial islets are of least significance to seabirds and some changes in the proposed regulation are possible without losing its effectiveness. Resolution of the conflict will probably take several months. I have suggested that the Division of Fish and Game undertake a census program on the islets in the proposed regulation, but it may be some time before this happens.
- (2) Hawaiian Islands National Wildlife Refuge--The boundary dispute involving this Refuge is still very much undecided, but negotiations for a three party (Hawaii Fish and Game, U.S. Fish and Wildlife Service, and National Marine Fisheries Service) cooperative study are underway. Mr. Brent Giezantner, of the U.S. Fish and Wildlife Service, has recently moved to Hawaii, where he will be spearheading cooperative research in the Refuge. Mr. Ed Bryan, of the Bishop Museum in Honolulu, has been contracted to prepare an annotated bibliography of Hawaiian and central Pacific seabirds as a preliminary effort in this study. Active research projects may begin as early as next summer. Also, Merlin Perkins visited the Refuge for his Wild Kingdom show during this last summer. The segment on the Refuge is expected to air sometime this winter. An article in National Geographic about the Leewards is expected to appear in Spring, 1977.

- (3) Millicent Quammen, a graduate student at U.C. Irvine is conducting a study of the effect that small shorebirds have on their food supply while feeding on intertidal mudflats. Upper Newport Bay and Mugu Lagoon are the sites where these studies will be carried out.

ITEMS OF INTEREST--

- (1) Los Angeles County Museum of Natural History

Ralph W. Schreiber has been appointed Curator of Birds, replacing Kenneth E. Stager, who has retired. Schreiber has conducted extensive research on pelicans, gulls, and other marine birds and looks forward to continuing his research on the west coast and in the tropical Pacific.

- (2) San Diego Natural History Museum

J. R. Jehl, Jr. is continuing a long-term study of birds on Los Coronados. Earlier this year the Mexican government announced that, for the first time in many years, tourist groups may be permitted access to the islands. The effect of this policy will be closely followed.

- (3) Sea World

Frank Todd, Curator of Birds, reports that Sea World had rehabilitated approximately 40 pelicans this fall, with birds being received from as far away as Las Vegas and Tucson. This high figure may indicate that Gulf of California birds enjoyed a favorable nesting season.

- (4) Recent literature:

The following ornithological literature published in the Transactions of the San Diego Society of Natural History, may be of interest. Copies may be ordered through the Library, Natural History Museum, P.O. Box 1390, San Diego, CA 92112.

Jehl, J. R., Jr. and S. I. Bond. 1975. Morphological variation and species limits in murrelets of the Genus Endomychra. Vol. 18, no. 2.

Jehl, J. R., Jr. 1975. Pluvianellus socialis: biology, ecology and relationships of an enigmatic Patagonian shorebird. Vol. 18, no. 3.

Storer, R. W. 1976. The behavior and relationships of the Least Grebe. Vol. 18, no. 6.

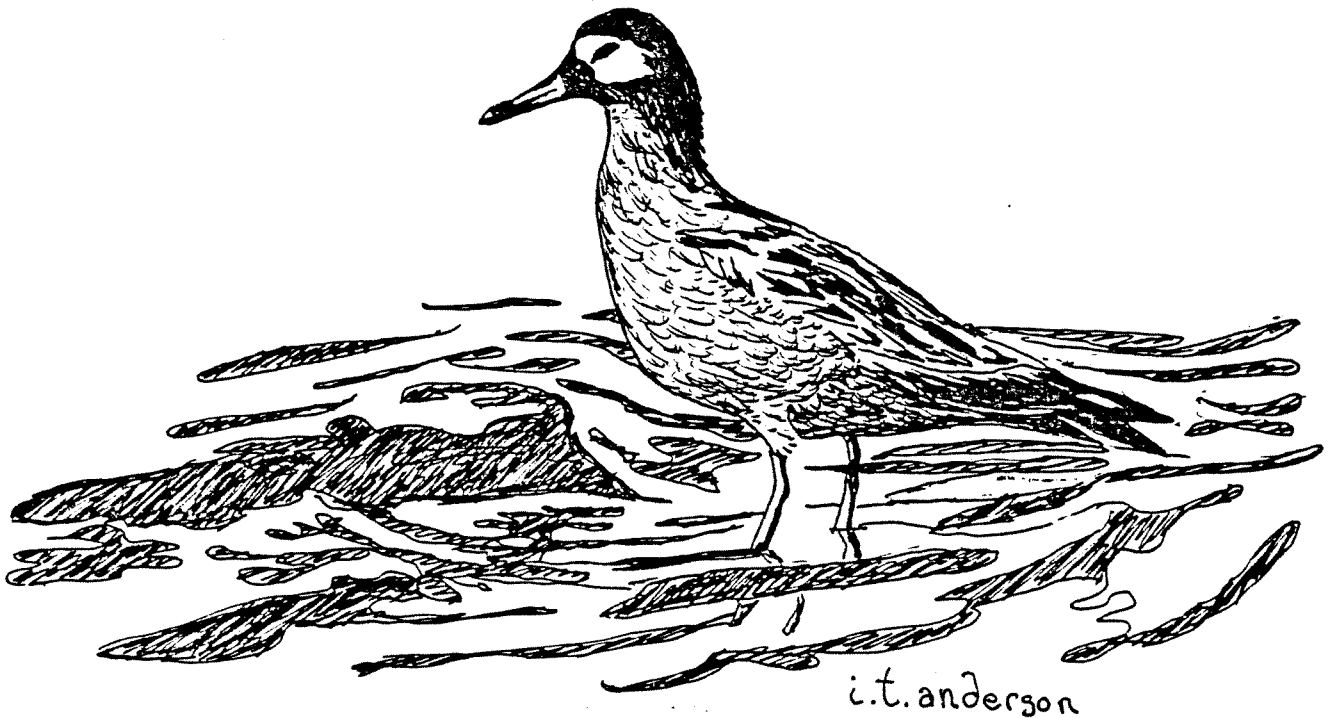
Jehl, J. R., Jr. and M. A. E. Rumboll. Notes on the avifauna of Isla Grande and Patagonia, Argentina. Vol. 18, no. 8.

DeWeese, L. R., and D. W. Anderson. 1976. Distribution and breeding biology of Craveri's Murrelet. Vol. 18, no. 9.



- (3) Kaula and Kahoolawe--The controversy involving the return of Kahoolawe Island to the State of Hawaii is still unresolved. As long as the issue remains undecided, the future of Kaula Island as a bombing target will be uncertain. Biologists from the Fish and Wildlife Service and the State Fish and Game visited the Island again in early September for censusing activities. There has been no document published by either agency regarding the impact of ongoing bombing activities on seabird populations. Nor has there been any attempt to include biologists from outside Federal or State agencies on any of the Kaula visits, despite repeated requests.

Robert J. Shallenberger  
Regional Representative  
Hawaii



the Antarctic and Subantarctic, and an estimate of krill consumption by birds. Calculations indicated there to be on the order of  $188 \times 10^6$  birds in the southern ocean (south of the subtropical convergence) with a biomass of some 577,000 metric tons. Sixty-five percent of the birds and 55% of the biomass is in the Subantarctic; 65% of total stocks and 90% of the biomass is comprised by penguins. The greatest importance of birds to south polar ecosystems (marine) comes largely through their role as consumers and competitors with mammals (including man). It was estimated that birds consume  $38 \times 10^6$  tons of food per year making them about equal in importance to both pinnipeds and cetaceans. It came out in another part of the meeting, a discussion of a computer simulation model of the Ross Sea pelagic ecosystem (by K. A. Green, Texas A & M University), that penguins are possibly among the most sensitive indicators of ecosystem state and much less expensive to monitor than invertebrates.... quite a concession coming from biological oceanographers! When more complete data are put into the model, particularly on birds, we will be very interested to see where birds then stand.

GENERAL NOTES ON SEABIRD CONSERVATION

THE LIVING RESOURCES OF THE SOUTHERN OCEAN;  
AN INTERNATIONAL CONFERENCE

by

David G. Ainley  
Point Reyes Bird Observatory  
4990 State Route 1  
Stinson Beach, CA 94970

If the primary predator of a community is destroyed, then surely this leaves a "surplus" of prey for its former competitors. Or at least that is the basic premise, based only on theory, that propels fisheries organizations to look ever harder at the feasibility of harvesting krill (Euphausiids, particularly Euphausia superba) in the Subantarctic and Antarctic. Now that harvest of southern whales has just about become economically unfeasible, fishing interests are eyeing the whales' food as a resource needing exploitation. Some researchers have gone so far as to say that krill now represents the largest single untapped fishery resource on Earth. For several years the Japanese, and to a much lesser degree the Russians, have been conducting experimental fishing of krill; in 1975, West Germany and Poland organized their first Antarctic expeditions with the sole purpose being to conduct experimental fishing in the Antarctic, particularly on krill.

The growing pressure and interest in further economic exploitation of antarctic living resources led the Scientific Committee on Antarctic Research (SCAR) and the Scientific Committee on Oceanic Research (SCOR), both of the ICSU (International Council of Scientific Unions), to organize an effort to (1) assess the present state of knowledge on the stocks and biology of potentially harvestable organisms in the southern oceans, and (2) to draw up a proposal for coordinated research on the marine communities of that region. The main thrust of this effort came in a meeting at Woodshole, Massachusetts, during mid-August 1975, hosted by the National Academy of Sciences. It was attended by about 60 scientists from 13 countries; these persons conferred mainly within the following working groups: krill; squid and other invertebrate resources; fish; marine mammals and birds. All in all a valuable exchange of information resulted. There is at least some indication that biological research will be coordinated in coming years, and that it will move in a common direction, hopefully, in a total ecosystem approach.

Since I wrote this report for the PSG it seems a summary is due on how birds fared in the meeting. Seabirds were represented primarily by Jean Prevost (France), John Croxall (U.K.) and myself, David Ainley (U.S.A.). We prepared and presented an estimate of seabird biomass in

121 copies of the statement to major west coast and other U.S. newspapers, to pertinent individuals in the Danish, Korean and Japanese embassies in Washington, to several national and local Japanese newspapers, to key NOAA, Interior Department, and state government officials and to U.S. Congressmen.

Although the problem received publicity from a variety of sources, the PSG policy statement was a major factor in bringing it to a head, particularly the mailing of individual copies. At least one Japanese newspaper, "Hokkaido Shinbun," printed the statement (translated into Japanese, of course). A note appeared in the highly-regarded scientific/trade newsletter "Ocean Science News," and other U.S. newspapers no doubt gave the issue due publicity. The Danish government replied to the statement with a polite letter explaining that their North Atlantic gillnet fishery was ending after 1975 (which it has); but until this most recent development, the Korean and Japanese embassies were conspicuously silent.

Replies to the policy statement from several U.S. Congressmen ranged from "thanks for letting me know about the problem," to the concrete action of Rep. Robert L. Leggett (California), Chairman of the Subcommittee on Fisheries and Wildlife Conservation and the Environment, of the House Committee on Merchant Marine and Fisheries. Along with Dillon Ripley's action, Leggett's interest and response to the statement was a key factor in getting the Interior and Commerce Departments to pass the ball to the Department of State where it can now do some good.

The recent passage of the extended coastal jurisdiction law by the U.S. Congress (the U.S. has claimed sovereignty over all ocean waters within 200 miles of all continental and insular U.S. shores), due to become effective spring 1977, could have beneficial effects on curtailing or at least reducing the gillnet mortality. If fisheries managers include protective measures for marine birds in any agreement to foreign fishing within U.S. jurisdiction, the gillnet mortality would be reduced substantially. Thankfully, many fisheries managers appreciate the value of maintaining the balance of the entire oceanic ecosystem, so they will be receptive to ideas for conserving marine birds.

However, although fisheries managers are concerned about the gillnet kill, bird resource managers are uncertain of what the best protective measures might be. Despite the great conspicuousness of marine birds, an adequate knowledge of their habits at sea remains quite elusive. Recent bird research connected with petroleum exploration and development on the North American outer continental shelf is beginning to shed some light on this, but specific studies addressed to the gillnetting problem are needed. A much better knowledge of how far and where marine birds range seaward from breeding colonies is needed, as is a knowledge of how these ranges vary seasonally. We have vague ideas that some species range farther seaward than others, and we believe that the range seaward for a given species may vary from colony to colony, but this needs to be pinned down with confidence and precision. A wide-ranging program of banding, color marking and radio telemetry on several colonies, backed by an extensive monitoring program at sea should reveal the answers to many of these questions. The result would be that marine bird managers could then intelligently recommend seasons and areas when gillnet fishing should be restricted.

## UPDATE ON SEABIRD MORTALITY FROM SALMON DRIFTNETS

by

Gerald A. Sanger  
U.S. Fish and Wildlife Service  
Office of Biological Services  
Anchorage, Alaska 99501

A recent deluge of publicity on seabird mortality from salmon gillnet fisheries in the North Pacific, aided by the Pacific Seabird Group's recent policy statement (Policy Statement No. 2, "Incidental Seabird Kills from Salmon Gillnet Fisheries," PSG Bull, 2(1):19-20), has gained the attention of government officials at a level high enough to do some good. A recent telegram from the U.S. Embassy in Tokyo to the Department of State in Washington, D.C. reads in part: "Foreign office (Saito) called 3/16 to give a 'tentative' reply to Embassy's inquiry about GOJ willingness to cooperate in exchange of views on seabird/gillnet problem. Almost verbatim answer was: GOJ is willing to approach the problem in a rational and practical manner in cooperation with USG. The GOJ would like to become better informed on the nature of the problem and therefore would appreciate receiving data on seabird mortality rates and details of the measures which USG might propose to alleviate problems. Word 'tentative' above is construed by Embassy to mean 'informal,' or 'interim'. When asked if GoJ is prepared to meet with U.S. side, Saito said that GOJ would prefer to study written material requested and would then be in better position to decide how to proceed further."

Accordingly, pertinent written material was forwarded to the Japanese Government. They will hopefully respond by agreeing to discuss the matter with U.S. officials and others; this will hopefully lead to protective action.

This favorable development is a result of nearly two years of international publicity. The first public awareness of the problem in the North Pacific came in August 1974, when Warren B. King brought it to the attention of the International Council for Bird Preservation (ICBP) at their meeting in Canberra, Australia. The American Ornithological Union (AOU) aired the situation in January 1975 in the annual report of their Conservation Committee (AUK, 92(1):126-136). During the spring and early summer of 1975, however, the publicity intensified even more. S. Dillon Ripley (Secretary of the Smithsonian Institution) published a review of the issue in the April issue of Smithsonian magazine, and in June 1975, in his capacity as the president of the ICBP, Ripley urged the Department of State to look into the problem "...as a likely violation of the U.S.-Japan Migratory Bird Treaty of 1973..." During the International Symposium on Conservation of Marine Birds in Northern North America in May 1975, Warren King again aired the problem in a scientific paper. The PSG got into the act by publishing their policy statement in the spring 1975 issue of the Bulletin. In mid-June, ex-PSG Chairman Mike Scott (aided mightily behind the scenes by his wife, Sharon) mailed out



Another fruitful avenue of research would be to place observers aboard fishing vessels to monitor the actual extent of gillnet mortality. The only information we now have on the extent of the mortality is based on extrapolations of numbers of birds caught during salmon research gillnetting in areas outside traditional high seas commercial gillnetting areas. Despite future conservation measures, some marine birds will in advertently be caught whenever gillnets are fished. Notwithstanding the legal problems, consideration might be given as to how these drowned birds could be salvaged for use as fertilizers, or perhaps even for human consumption.

Finally, although the problem has gained the attention of high government officials, biologists, resource managers and others interested in the welfare of marine birds need to remain vigilant. Marine birds will not become in fact safe from detrimental gillnet fishing until protective measures are effected and enforced.

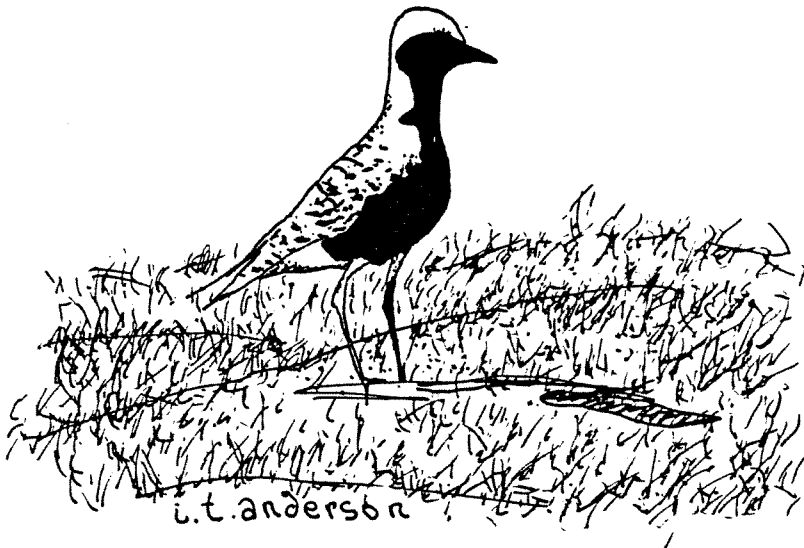


TABLE 1

Comparison of estimated breeding numbers and biomass  
of Canada's and West Greenland's colonial auks.

Species	Breeding population		Biomass		Average body weight in grams (sample size in parentheses)	Source for body weights
	No.	%	weight (kg)	%		
Razorbill	39,100	0.4	36,784	0.3	685(7)	Bédard, 1969a
Common Murre	1,307,000	11.9	1,378,885	13.9	1055(375)	Belopolskii, 1961
Thick-billed Murre	8,125,000	74.2	8,060,000	80.8	992(234)	Belopolskii, 1961
Dovekie	12,000	0.1	1,992	0.1	166(8)	Bédard, 1969b, Johnson, 1935
Black Gulllemot	50,000	0.5	21,600	0.2	432(120)	Belopolskii; 1961
Ancient Murrelet	200,000	1.8	41,000	0.4	205(154)	Sealy, 1972
Cassin's Auklet	500,000	4.6	84,000	0.8	168(1300)	D.A. Manuwal, pers. comm.
Rhinoceros Auklet	140,000	1.3	75,520	0.7	518(31)*	Author, unpublished data
Tufted Puffin	55,000	0.5	41,525	0.4	755(87)**	Wehle and author, unpublished data
Atlantic Puffin	522,000	4.7	239,076	2.4	458(225)	Nettleship, 1972
Total	10,950,100	100.0→	9,967,382	100.0		

\* Measured by author on Triangle Island, British Columbia.

\*\* 80 (average weight: 754.6 grams) measured by Wehle on Buldir Island, Aleutian Islands, Alaska;  
7 (average weight: 755.7 grams) measured by author on Triangle Island. Dr. D. A. Manuwal and Mr. D. H. S. Wehle are gratefully acknowledged for providing body weight data on Cassin's Auklets and Tufted Puffins, respectively.

## GLOBAL MURRE WATCH

by

Kees Vermeer  
Canadian Wildlife Service  
5421 Robertson Road  
Delta, British Columbia, Canada V4K 3N2

In a recent article (Vermeer, 1976) it has been pointed out that colonial auks may serve as the best indicators of the effects of oil pollution on seabird populations in the northern hemisphere as their colonies can be relatively easily surveyed, and as accurate parameters on their breeding populations, reproductive success and population turnover rates can be measured. Since murrelets are widely distributed, are among the most numerous, conspicuous and largest of the auks, and are highly vulnerable to oil it is suggested here that a GLOBAL MURRE WATCH should be initiated by marine ornithologists. If such a WATCH would be kept there would be exact breeding population data available over the years for at least one group of seabirds against which the effects of oil pollution, and perhaps other effects such as gillnetting, can be measured on a world-wide scale.

Murrelets constitute 86% of Canada's and West Greenland's colonial auks and 95% of their biomass (Table 1). Canada's Atlantic, Eastern Arctic and West Greenland's breeding populations are calculated from Brown et al, 1975 and those from Canada's west coast are from unpublished data of the writer. Preliminary population figures shown in Table 1 will change with more accurate estimates, discovery of new colonies, and with better understanding of population fluctuations. Biomass figures will be improved with more quantitative information on body weights of local races of auks. Ornithologists wishing to participate in a GLOBAL MURRE WATCH should notify the writer.

### LITERATURE CITED

- BEDARD, J. 1969a. Histoire naturelle du Gode, Alca torda dans le golfe Saint - Laurent, Province de Quebec, Canada. Etude du Service Canadien de la Faune. No. 7, 77pp.
- BEDARD, J. 1969b. Adaptive radiation in Alcidae. Ibis 111: 189-198.
- BELOPOLSKII, L. O. 1961. Ecology of sea colony birds of the Barents Sea. (English translation by Israel Program for Scientific Translations, Jerusalem, 1961, 346 pp.).
- BROWN, R. G. B., D. N. NETTLESHIP, P. GERMAIN, C. E. TULL and T. DAVIS. 1975. Atlas of eastern Canadian seabirds. Canadian Wildlife Service, Ottawa, Canada, 220pp.
- JOHNSON, R. A. 1935. Additional Dovekie weights. Auk 52: 309.

## SHORT-TAILED ALBATROSS POPULATION INCREASING

by

Gerald A. Sanger  
U.S. Fish & Wildlife Service  
Office of Biological Services  
Anchorage, Alaska

Those interested in the endangered Short-tailed Albatross (Diomedea albatrus), the largest North Pacific seabird, will be glad to learn that their population has been increasing, albeit slowly. From an estimated world population of "...perhaps as high as 75-100-birds" (Sanger, 1972, Biol. Conserv., 4(3):189-193) based on a 1967 breeding ground count and estimated numbers at sea, the population had increased to a count of 11 fledged chicks and an estimated 57 breeding pairs on the Torishima Island colony in May 1973 (Tickell, 1973, Sea Swallow, 23:1-4). Since immatures spend all or most of the breeding season at sea, the total world population must then be well over 125 birds. This is a heartening indication indeed, considering that only 25 birds total were estimated on Torishima in 1955 (Ono, 1955, Tori, 14:24-32).

A report of a pioneering colony of 12 Short-tails on Senkaku-Rettó Island (550 km SW of Torishima and 200 km NE of Formosa) is intriguing, but it may be suspect (W. L. N; Tickell, personal correspondence). Tickell plans to verify this report by visiting the Senkakus during a future breeding season. If the report is true, however, the species has gained yet another toehold on existence and would seem to be less threatened by the recurring volcanic activity on Torishima, the only confirmed breeding colony for the species.

- NETTLESHIP, D. N. 1972. Breeding success of the Common Puffin (Fratercula arctica L.) on different habitats at Great Island, Newfoundland. Ecological Monographs 42: 239-268.
- SEALY, S. G. 1972. Adaptive differences in breeding biology in the marine bird family Alcidae. Ph.D. thesis, University of Michigan, Ann Arbor, 283pp.
- VERMEER, K. 1976. Colonial auks and eiders as potential indicators of oil pollution. Marine Pollution Bulletin 7: 165-167.



EDITOR'S NOTES: I am grateful to my wife, Irene Trautt Anderson, for doing the ink drawings of Alaskan seabirds, and for typing this issue of the PSG Bulletin. Her time has been entirely voluntary. Donald M. Baltz also aided in compiling and organizing our membership list, no easy task.

The PSG Bulletin solicits help (typing, artistry, etc.) for future bulletins. We can offer free PSG memberships to those who aid significantly in producing PSG Bulletins.

The PSG Bulletin also accepts short articles or notes on marine or waterbird conservation. Please submit them to me in the form of the articles of this issue.

Daniel W. Anderson  
Editor  
January 1977

# PACIFIC SEABIRD GROUP

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AND THEIR ENVIRONMENT

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Editor, PSG Bulletin: Daniel W. Anderson, Division of Wild-  
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