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PACIFIC SEABIRD GROUP

Dedicated to the Study and Conservation of Pacific Seabirds
and Their Environment

The Pacific Seabird Group (PSG) was formed in 1972 due to the need for better communication among Pacific seabird researchers. PSG provides a forum for the research activities of its members, promotes the conservation of seabirds, and informs members and the public of issues relating to Pacific Ocean seabirds and their environment. PSG holds annual meetings at which scientific papers and symposia are presented. The group's journals are *Pacific Seabirds* (formerly the PSG *Bulletin*), and *Marine Ornithology* (published jointly with the African Seabird Group, Australasian Seabird Group, Dutch Seabird Group, and The Seabird Group [United Kingdom]; www.marineornithology.org). Other publications include symposium volumes and technical reports. Conservation concerns include seabird/fisheries interactions, monitoring of seabird populations, seabird restoration following oil spills, establishment of seabird sanctuaries, and endangered species. Policy statements are issued on conservation issues of critical importance. PSG members include scientists, conservation professionals, and members of the public from both sides of the Pacific Ocean. It is hoped that seabird enthusiasts in other parts of the world also will join and participate in PSG. PSG is a member of the International Union for Conservation of Nature (IUCN), the Ornithological Council, and. the American Bird Conservancy. Annual dues for membership are $25 (individual and family); $15 (student, undergraduate and graduate); and $750 (Life Membership, payable in five $150 installments). Dues are payable to the Treasurer; see Membership/Order Form next to inside back cover for details and application.

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REPORT

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WILD BIRDS AND H5N1 AVIAN INFLUENZA: A REVIEW

Vivian Mendenhall

Recent outbreaks of H5N1 influenza in poultry and humans have raised worldwide concern about the disease's effect on humans and agriculture. Biologists are striving to understand the effects of the disease on wild birds; governments and the public are apprehensive that wild birds may spread the disease to poultry or even humans. This article reviews information on avian influenza (AI) in wild birds in general, particularly seabirds. It includes current information on the H5N1 outbreak, with data on H5N1 among wild birds in Europe. This information is recent and has largely been overlooked by the North American media.

There are now many sources of information on AI. International agencies report outbreaks of H5N1 in poultry, humans, and wildlife regularly on the Web (e.g., OIE 2006a**,** NWHC 2006a). The literature on AI in wild birds includes two new reviews (Clark and Hall 2006**,** Olsen et al. 2006) and an earlier one by Stallknecht and Shane (1988), in addition to research on special topics. Abstracts from a conference in May 2006 on the role of wild birds in the H5N1 epizootic are available on the Web (FAO 2006).

BACKGROUND: AVIAN INFLUENZA IN WILD BIRDS

AI is widespread in wild birds. The virus typically causes no observable signs of disease in natural populations. Before 2005, only one dieoff in wild birds was attributed to AI, the death of 1300 Common Terns (*Sterna hirundo*) in South Africa in 1961 (Becker 1966). Internal organs appear normal on necropsy (Hansen 1999). Mild AI occurs in domestic poultry; since 1959 there also have been periodic severe outbreaks in commercial flocks on all continents (Clark and Hall 2006, Olsen et al. 2006). Signs of mild influenza in domestic poultry vary with species and strain of virus, but they may include lethargy, coughing, diarrhea, or tremors; feeding and egg production may be affected for a time. Birds with severe AI may die within a day of appearing ill, with gross inflammation of the respiratory tract, nervous system, and other organs, paralysis, head tilt, and tremors (Ellis et al. 2004, Zhou et al. 2006).

AI is identified in a bird by analyzing a sample from its cloaca for virus. Past exposure can be assessed (in living birds) by immunological screening of blood samples (Stallknecht and Shane 1988, Ellis et al. 2004). The virus is identified in the laboratory using gene sequencing and/or in vitro antigen reactions. Genetic studies also can suggest the source and relationships of a virus.

The term "influenza" refers to the disease caused by several members of a group of closely related viruses, which are divided into 3 major types. Influenza type A virus is the one that has caused human pandemics; its natural host is wild birds, but it can evolve to infect mammals. Influenza B and C are less common and infect only humans (CDC 2005). Subtypes of influenza A are named for the two principal proteins in the virus's external coat, hemagglutinin (H) and neuramidase (N) (thus H5N1, H3N2, etc.). Hemagglutinin exists in 16 subtypes and neuramidase in 9 subtypes, all of which have been found in wild birds in various combinations (CDC 2005). Influenza viruses are constantly evolving, so that a single subtype often includes multiple strains, which can vary in either ease of transmission or severity of the disease. Highly pathogenic AI strains (those that cause severe disease in poultry) appear to originate in domestic poultry flocks (NWHCb). Each strain affects avian species differently; even H5N1includes strains that cause only mild illness in some or all species (NWHC 2006b).

AI has been detected in many orders and species of wild birds. Stallknecht and Shane (1988) listed 12 orders and 88 species in which AI occurs, and a few species have been added since. The virus is most common in aquatic birds. This is partly because the virus is passed in their feces, and it can live for days or weeks in fresh water until it is ingested by other birds (Stallknecht et al. 1990, Ito et al. 1995). The predominant groups that harbor AI are dabbling ducks, gulls, and shorebirds, but it also has turned up in some seabirds, loons, grebes, ibises, herons, and coots, and even in terrestrial groups such as raptors, owls, and passeriformes (Stallknecht and Shane 1988). Some AI subtypes are found only in certain groups of birds, suggesting that several isolated "pools" of virus exist in natural populations (Hinshaw et al. 1982). Table 1 lists seabirds for which AI has been reported.

The proportion of AI-infected individuals in a wild population varies with species, age, and time of year. Fewer than 2% of individuals in most species carry the virus. However, the mean prevalence of AI in dabbling ducks is 10.1%, with a high of 60% in some North American species in early autumn (Olsen et al. 2006). The full range of species that carry AI is probably greater

than recorded because of insufficient sampling (Stallknecht and Shane 1988); the same is true for prevalence of the disease in many species that do carry it (Olsen et al. 2006).

H5N1 IN WILD BIRDS

In 1997, a new type of influenza A, H5N1, caused a severe outbreak among poultry and a human death in Hong Kong, and these outbreaks have been repeated every year since 2001. Starting in late 2003, the disease spread rapidly to domestic flocks elsewhere in Southeast Asia. More than 150 million chickens and ducks died of the disease or were killed during disease control programs, which is the largest impact of any AI outbreak on domestic fowl (NWHC 2006b). Additional people died of H5N1 beginning in 2003, apparently having been exposed to the virus directly from poultry. As of June 2006, the H5N1 virus has not evolved the ability to pass efficiently between humans.

The World Organization for Animal Health (OIE) requires that all nations report highly pathogenic AI in either domestic or wild animals. The spread of H5N1 across Eurasia from 1997 until the present can be followed through reports on the Internet from OIE and other agencies. As of April 2006, H5N1 had caused mortality in more than 80 species of wild birds (NWHC 2006b).

Mortality of wild birds from H5N1 was first noticed in Hong Kong in 2002. The virus was isolated from a Tree Sparrow (*Passer montanus*) and a feral Rock Dove (*Columba livia*) that were found dead in parks where captive species were dying. It also was confirmed in two Grey Herons (*Ardea cinerea*), a Little Egret (*Egretta garzetta*), a Black-headed Gull (*Larus ridibundus*), and a Peregrine Falcon (*Falco peregrinus*) found sick or dead elsewhere in Hong Kong. Surveillance of other wild flocks was negative and no high mortality was noticed among wild birds (Ellis et al. 2004). Intensive surveillance began in Hong Kong in October 2005; since then H5N1 has been reported in about a dozen wild birds found dead, mostly passerines (OIE 2006b).

However, H5N1 began to spread explosively among wild birds in 2005 (Table 2). In May of that year an outbreak of the disease killed more than 6000 birds at Lake Qinghai, a staging area in western China (Zhou et al. 2006). Species included the Bar-headed Goose (*Anser indicus*), Great Black-headed Gull *(Larus ichthyaetus*), Ruddy Shelduck (*Tadorna ferruginea*), Tufted Duck (*Aythya fuligula*), Great Cormorant (*Phalacrocorax carbo*), and Brown-headed Gull (*L. brunnicephalus*) (Liu et al. 2005, Zhou et al. 2006). A considerable fraction of the world's Bar-headed Goose population may have died in this outbreak (Olsen et al. 2006). During the same year the disease moved west and north: Russia reported two dieoffs of swans (*Cygnus* sp.) in Kalmykia and Astrakhan, totaling 744 birds (OIE 2005a), and 89 birds died in August in Mongolia (specimens included Bar-headed Geese and Whooper Swans *C. cygnus*; OIE 2005b, c). H5N1 was confirmed in specimens from all these events. A second large dieoff occurred in western China and Tibet in April and May 2006, including 939 Bar-headed Geese, 94 ducks, and over a dozen other species (OIE 2006c, Table 2).

By early 2006, H5N1 in wild birds had spread to southwestern Asia and southeastern Europe: Azerbaijan in January; Iran, Georgia, and the Russian Black Sea coast in February; Kazakhstan in March (Table 2-3). The disease did not stop there. Balkan countries from Greece to Croatia reported dead birds in January and February, and by March most countries of Europe were reporting dead wild birds in which H5N1 was confirmed (Table 3-4). The outbreak ended by April, except for 7 scattered cases in May.

More than 450 birds from at least 8 orders and 25 species were reported dead in Europe. Whooper Swans and Mute Swans (*Cygnus olor*) comprised 34% of dead individuals. (Mute Swans are native wild birds in Europe; captive individuals are omitted from this paper.) The range of wild bird groups infected with H5N1 appears similar to that for other types of AI; the exception was that no shorebirds were reported, although several species winter in Europe (Mullarney et al. 2000). The only case of a European seabird that tested positive for H5N1 was 30 Black-headed Gulls in Croatia that were caught alive for sampling (OIE 2006d). Most mortality in Europe was sporadic; only in Italy and France did more than 10 individuals (all swans) die within any 1-week period (OIE 2006e, f, g).

H5N1 may have been carried to wild populations of Europe by birds that dispersed during a severe cold spell that began in January 2006 (U.S. Department of Agriculture 2006). Swans normally winter in central and Eastern Europe (Mullarney et al. 2000), but aquatic birds were forced to move south and west in search of open water (Hon Ip, USGS National Wildlife Health Center, pers. comm.). Greece and Bosnia-Herzegovina both reported that flocks of swans had arrived 1 to 3 weeks before they became ill (OIE 2006g). On the other hand, it now appears that the disease was not carried into Europe during the spring migration. European outbreaks peaked and many ended before migrants arrived from the south (March to April in southern Europe, April to May in the north). Furthermore, no cases have been reported among wild birds in Africa, where many European species winter, nor in nations such as Turkey or Spain, which are on migration corridors between Africa and Europe (OIE 2006a).

ARE WILD BIRDS SPREADING INFLUENZA AND INFECTING DOMESTIC FLOCKS?

Wild birds are generally acknowledged as the reservoir for AI; many strains of the virus circulate permanently in avian populations, and these have the potential to infect domestic birds (Clark and Hall 2006). Transmission to poultry is favored by contact with wild aquatic birds, which happens especially in Southeast Asia. Once poultry become infected with

AI, the virus can evolve into a higher-pathogenicity strain, especially the H5 and H7 subtypes, and (under some circumstances) have the ability to infect humans.

The role of wild birds in spreading highly pathogenic AI has been debated for decades, and it is currently a major concern. Agreement is still evolving on the importance of wild birds and other factors in the spread of H5N1. It is now clear that the disease has traveled to new areas via wild birds (Domenech et al. 2006), but that severe outbreaks also have been introduced or spread by other agents (Brown et al 2006).

It has been suggested that wild birds are unlikely to transmit a highly pathogenic disease very far, because they would be too ill to continue migration. However, even a severe disease varies in its effects among species and individuals; some experimentally infected ducks suffered no symptoms, although the virus propagated in them and spread to other birds (Sturm-Ramirez et al. 2005).

AI in wild birds has been studied near outbreaks of AI in domestic poultry; in some places the virus may have been transmitted between wild and domestic birds and/or vice versa, whereas in other cases there was no apparent interchange (Clark and Hall 2006). There is evidence that the single poultry outbreak in France originated among waterfowl in a nearby wetland, because birds dying in the marsh had the same strain of H5N1 as the poultry (OIE 2006i).

On the other hand, H5N1 apparently has spread to some parts of the world without the involvement of wild birds. Farms in several African nations have suffered outbreaks, but surveillance of wild aquatic birds in Africa detected no H5N1 (although the birds carried other, endemic strains; Gaidet et al. 2006). Several alternative means of spreading the disease are suspected—despite official controls, live poultry and poultry products are still smuggled into many countries and can transmit the disease (Normile 2005, Brown et al 2006).

WHAT SHOULD BE DONE?

Monitoring of domestic flocks and wild birds for H5N1 is a high priority. The United States, as well as other nations, is carrying out intensive surveillance programs for H5N1 in both wild and domestic birds (NWHC 2006c). Monitoring of wild birds has been carried out in the U.S. since the late 1990s and is now being intensified (Normile 2005, Alaska Interagency HPAI Bird Surveillance Working Group 2006). This monitoring is focused on Alaska, because American and Asian flyways are interlinked there: several Alaskan-breeding species migrate to Southeast Asia, some that breed in northeast Asia migrate through or winter in Alaska, and most Alaskan breeders winter elsewhere in North America. The goal for 2006 is to monitor waterfowl, gulls, shorebirds, and passerines from coastal locations, the Interior, and some islands. Samples are being taken from both live-caught and hunted birds. Seabirds to be monitored include Glaucous Gull (*Larus hyperboreus*), Glaucous-winged Gull (*L. glaucescens*), and Aleutian Tern (*Sterna aleutica*) (Alaska Interagency HPAI Bird Surveillance Working Group 2006).

If AI is detected in either wild or domestic birds, the priority is to dispose of infected domestic flocks and to impose rigorous protection for other poultry. Precautions required by the European Union include (1) a 3-km zone around any outbreak, where poultry may be culled and cannot be shipped without strict controls, and (2) a 10-km zone where poultry must be kept indoors, strict hygiene is required to protect both poultry and workers, and hunting is banned (Europa 2006). Rigourous precautions can be effective—despite extensive disease among wild birds in the European Union, there have been only five outbreaks of H5N1 in domestic flocks there as of 9 June 2006 (one each in France, Sweden, Germany, Denmark, and Hungary; Europa 2006).

Much more needs to be learned about the epidemiology of AI in wild birds, particularly of H5N1. However, the most crucial factor in protecting humans and the agricultural economy is to control the disease in domestic flocks (Clark and Hall 2006, FAO 2006, Olsen et al. 2006, Stallknecht and Brown 2006). Public education is needed to defuse anxiety about wild birds, inform people about effective precautions, and prepare them for control measures in case these are needed. PSG may be able to contribute to this effort in the future.

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TABLE 1. Seabird species in which an avian influenza virus has been isolated

Family/Species	Location	Reference
Procellariidae		
Wedge-tailed Shearwater (*Puffinus pacificus*)	Australia	Stallknecht & Shane 1988
Phalacrocoracidae		
Great Cormorant (*Phalacrocorax carbo*)	Romania	Stallknecht & Shane 1988
Laridae		
Black-tailed Gull (*Larus crassirostris*)	Japan, China	Stallknecht & Shane 1988, Ellis et al. 2004
Ring-billed Gull (*Larus delawarensis*)	USA	Hinshaw et al. 1982
Herring Gull (*Larus argentatus*)	USA, USSR	Hinshaw et al. 1982, Stallknecht & Shane 1988
Great Black-backed Gull (*Larus marinus*)	USA	Hinshaw et al. 1982
Great Black-headed Gull (*Larus ichthyaetus*)	China	Liu et al. 2005
Laughing Gull (*Larus atricilla*)	USA	Kawaoka et al. 1988
Franklin's Gull (*Larus pipixcan*)	USA	Hinshaw et al. 1982
Brown-headed Gull (*Larus brunnicephalus*)	China	Liu et al. 2005
Black-headed Gull (*Larus ridibundus*)	Hong Kong, Germany	Stallknecht & Shane 1988
Kittiwake (*Rissa* spp.)	Pribilof Isls., USA	Hansen 1999; Hansen, pers. comm.[1]
Sternidae		
Lesser Noddy (*Anous stolidus*)[2]	Australia	Stallknecht & Shane 1988
White-winged Black Tern (*Chlidopnias leucoptera*)	USSR	Stallknecht & Shane 1988
Common Tern (*Sterna hirundo*)	South Africa	Becker 1966
Arctic Tern *(Sterna paradisaea*)	USSR	Stallknecht & Shane 1988
Sooty Tern (*Sterna fuscata*)	Australia	Stallknecht & Shane 1988
Sandwich Tern (*Sterna sandvicensis*)	Germany	Stallknecht & Shane 1988
Alcidae		
Common Murre (*Uria aalge*)	USSR	Stallknecht & Shane 1988
Murre (*Uria* spp.)	Pribilof Isls., USA	Hansen 1999; Hansen, pers. comm.[1]
Puffin (*Fratercula* spp.)	Pribilof Isls., USA	Hansen 1999; Hansen, pers. comm.[1]

[1]Wallace Hansen, U.S. Geological Survey, National Wildlife Health Center. Specimens were collected in the 1970s; results are unpublished.

[2]English and Latin names as in Stallknecht and Shane 1988. *A. stolidus* now refers to Brown Noddy, *A. tenuirostris* to Lesser Noddy.

TABLE 2. Reports of wild birds dying in Asia, 2005-2006, with high-pathogenicity H5N1 avian influenza confirmed, by date and country. Source: compiled from OIE 2006a, except as noted.

Dates of outbreak	Country	Total died	Principal species[1]		Other species (5 or fewer per species)
			Nos.	Species	
May 2005[2]	China, Qinghai	>6000[2]	>3000	Bar-headed Goose (*Anser indicus*)	
			>1300	Great Cormorant (*Phalacrocorax carbo*)	
			>950	Brown-headed Gull (*Larus brunnicephalus*)	
			>540	Great Black-headed Gull (*Larus ichthyaetus*)	
			>140	Ruddy Shelduck (*Tadorna ferruginea*)	
			>12	Tufted Duck (*Aythya fuligula*)	
2 Aug 05	Mongolia	89	?	Bar-headed Goose	
			?	Whooper Swan (*Cygnus cygnus*)	
10 Jan-23 Feb 06	Hong Kong	13	12	Passeriformes	Little Egret (*Egretta garzetta*)
2 Feb 06	Iran, Rasht	"A few"	?	Swan sp. (*Cygnus* sp.)	
23 Feb 06	Georgia	9	9	Swan sp.	
10 Mar 06	Kazakhstan	3	3	Swan sp.	
13 Apr 06	China, Liaoning	2	1	Duck sp.	
			1	Magpie	
23 Apr 06	China, Tibet	1169	939	Bar-headed Goose	Ruddy Sheduck[3]
			94	Duck sp.	"Other"
4 May 06	Mongolia	1	1	Whooper Swan	

[1]Taxa are given as listed in source; not all were identified to species. [2]Zhou et al. 2006; species numbers estimated from percentages given in paper. [3]NWHCd.

TABLE 3. Reports of wild birds in eastern Europe dying with high-pathogenicity H5N1 avian influenza confirmed, by date and country. Source: compiled from OIE 2006a.

Dates of outbreak	Country	Total died	Principal species[1]		Other species (5 or fewer per species)
			Nos.	Species	
2005[2]	Russia (Kalmykia, Astrakhan)	744	744	Swan sp. (*Cygnus* sp.)	
29 Jan 06	Azerbaijan	?	?	"Various"	
30 Jan-4 Mar 06	Greece	17	10	Mute Swan (*Cygnus olor*)	Swan sp., Red-breasted Goose (*Branta ruficollis*)
31 Jan 06	Bulgaria	1	1	Mute Swan	
4 Feb 06	Hungary	7	7	Mute Swan	
9 Feb 06	Russia (Black Sea)	32	?	? Swan spp., duck spp., crow spp.	
11 Feb 06	Slovenia	14	12	Mute Swan	Grey Heron (*Ardea cinerea*), Northern Pintail (*Anas acuta*)
15 Feb-28 Mar 06	Croatia	4	4	Swan sp.	
16 Feb 06	Bosnia-Herzogovina	2	2	Swan sp.	
17-18 Feb 06	Slovakia	2	1 1	Smew (*Mergellus albellus*) Peregrine Falcon (*Falco peregrinus*)	
28 Feb 06	Serbia-Montenegro	9	9	Mute Swan	
2-27 Mar 06	Poland	46	44	Swan spp.	Mute Swan, Common Merganser (*Mergus merganser*)
20 Mar-19 May 06	Czech Republic	24	24	Mute Swan	
20 Apr 06	Ukraine	6	6	Great Cormorant (*Phalacrocorax carbo*)	

[1]Taxa are given as listed in source; not all were identified to species. [2]No month or day given.

TABLE 4. Reports of wild birds in western Europe dying with high-pathogenicity H5N1 avian influenza confirmed, by date and country. Source: compiled from OIE 2006a.

Dates of outbreak	Country	Total died	Principal species[1]		Other species (5 deaths or fewer per species)
			Nos.	Species	
2-19 Feb 06	Italy	22	19	Mute Swan (*Cygnus olor*)	Mallard (*Anas platyrhynchos*), Common Buzzzard (*Buteo buteo*), Purple Swamp-Hen (*Porphyrio porphyrio*)
8 Feb-28 Apr 06	Germany (north)	87	36 20 15 8	Swan sp. (*Cygnus* sp.) Falconiformes[2] Goose sp. (*Anser* or *Branta* sp.) Duck sp. (Anatini)	Great Crested Grebe (*Podiceps cristatus*), Cormorant sp. (*Phalacrocorax* sp.), Gull sp. (*Larus* sp.), Coot (*Fulica atra*), Ciconiidae
13 Feb 06	Austria	2	2	Swan sp.	
13 Feb-29 Mar 06	France	63	56	Swan spp.[3]	Heron sp., Barnacle Goose (*Branta leucopsis*), duck sp., Tufted Duck (*Aythya fuligula*), Pochard (*Aythya ferina*), Common Buzzard
24 Feb-18 Apr 06	Sweden	13	12	Tufted Duck	Greater Scaup (*Aythya marila*)
26 Feb-11 Mar 06	Switzerland	9	2 2	Pochard Tufted Duck	Little Grebe (*Tachybaptus ruficollis*), Common Merganser (*Mergus merganser*), duck spp., Coot
2 Mar-12 May 06	Germany (south)	64	31 21	Swan sp. Duck sp.	Great Crested Grebe, goose sp., merganser sp. (*Mergus* sp.), Falconiformes, Coot, Strigiformes
12 Mar-22 May 06	Denmark	31	12 6 4	Tufted Duck Common Buzzard Mute Swan	Great Crested Grebe, Whooper Swan (*Cygnus cygnus*), Swan sp., Greylag Goose (*Anser anser*), Rough-legged Hawk (*Buteo lagopus*), Peregrine Falcon (*Falco peregrinus*), Magpie (*Pica pica*)
30 Mar 06	Scotland	1	1	Whooper Swan	

[1]Taxa are given as listed in source; not all were identified to species. [2]Included 4 Common Buzzards. [3]Included Whooper and Mute Swans.

ACHIEVEMENT AWARDS

The Pacific Seabird Group occasionally honors outstanding contributors to seabird science and conservation with Lifetime Achievement or Special Achievement Awards. At the 33rd Annual Meeting on 18 February 2006, PSG honored two outstanding people: G. Vernon Byrd for Lifetime Achievement, and Mark Rauzon for Special Achievement.

LIFETIME ACHIEVEMENT AWARD: G. VERNON BYRD

George J. Divoky and Robert H. Day

At the PSG Annual Meeting of February 2006 in Girdwood, Alaska, the group presented its Lifetime Achievement Award to George Vernon Byrd, Jr.

PSG established the Lifetime Achievement Award in 1992 to honor individuals who have made significant, long-term contributions to seabird science, conservation, and education. The award has been presented eighteen times, but this is the first time we recognize the long-term contributions of a post-World War II "baby boomer." Those born after 1 January 1946 grew up in a prosperous peacetime environment that made possible, among many things, the pursuit of interests in nature and biology in ways not available to preceding generations. As the boomers matured in the 1960s and 1970s, government and public attention was just turning to the increasing evidence of anthropogenic effects on the environment, and thus opportunities for careers in conservation and research were beginning to expand. When PSG was formed in the early 1970s, the baby-boomer cohort had just finished college and embarked on careers, and it provided PSG's early members and boundless enthusiasm—which rapidly allowed the group to become a vibrant organization in seabird research and conservation.

At the time of PSG's founding, Vern Byrd had just moved from being an avid birdwatcher to an agency biologist in the Aleutian Islands National Wildlife Refuge (NWR). Over the ensuing 30-plus years, North Pacific seabirds and other seabird investigators were to benefit from his considerable research and management talents, as well as his unflagging good humor and optimism. His research, preservation, and restoration of seabird populations in two major North Pacific archipelagos—the Aleutian Islands and Hawaiian Islands—has had an indelible impact, not just on seabird research but also on the global status of North Pacific seabirds.

Vern was raised in Shelby, North Carolina, where he was born on 16 January 1946. After obtaining his Bachelor of Science degree in Wildlife Biology from the University of Georgia in 1968, he accepted a commission in the U.S. Navy. Vern's career in marine ornithology began when the young officer was posted to the naval station at Adak Island. This outpost, affectionately known as the "Birthplace of the Winds," was located in the middle of the 1200-mile-long Aleutian chain, halfway between North America and Asia. At Adak Naval Station, he served as a Line Officer and Military Wildlife Conservation Officer from 1968 to 1971. Adak's location allowed Vern to pursue his interest in birds at a unique, remote location. During this time, he began a still-ongoing research collaboration with Dan Gibson of the University of Alaska—Fairbanks. Their work on bird migration in the Aleutian Islands over the past 30 years has greatly increased our understanding of the avifauna in one of the most remote regions of the United States (Byrd et al. 1974, 1978; Byrd and Gibson 1980, Gibson and Byrd 2006). This information, and the recognition of a regular north–south migration of Asiatic birds through the western Aleutians, was important in the renegotiation of the Migratory Bird Treaty Act with Russia in the 1970s.

Vern's early work in the Aleutians also included collaboration with the legendary Robert D. "Sea Otter" Jones, Jr. Several decades earlier, Jones had almost single-handedly begun the only post-World War II natural history work in this region (Jones and Byrd 1979). In 1971, after leaving the U.S. Navy, Vern moved from Adak to Cold Bay, at the tip of the Alaska Peninsula, to work as a biological technician for the U.S. Fish and Wildlife Service at the Izembek and Aleutian Islands National Wildlife Refuges (NWR). There, he studied the abundant waterfowl that stage in the lagoons at Izembek and compiled what little data were then available on the distribution and abundance of Aleutian seabirds. At Izembek NWR, he also began a collaboration with Ed Bailey, a biologist with the refuge who shared Vern's interest in removing introduced mammal species from nesting islands of seabirds and waterfowl (Byrd et al. 1997).

In 1972, Vern returned to Adak as Refuge Manager and Wildlife Biologist for the Aleutian Islands NWR. At Adak Naval Station he established the first formal refuge office actually located within the refuge. His fieldwork in-

VERN BYRD: Weighing auklet on Buldir Island, Aleutian Islands; Byrd and bird having a close encounter; receiving Lifetime Achievement Award from Bob Day; family at awards banquet: son and daughter-in-law Mark and Vivian Byrd, wife Valerie, and Vern.

cluded monitoring cleanup after the nuclear testing at Amchitka Island, where the Atomic Energy Commission had detonated three nuclear explosions, in 1965, 1969, and 1971. The last of these (named "Cannikin") was the largest nuclear test in US history, with a destructive power 400 times that of the atomic bomb dropped on Hiroshima—the detonation that ended World War II and precipitated that baby boom.

At this time, Vern also began the major work of overseeing the inventory of Aleutian seabirds. He established monitoring programs and facilitated fieldwork on seabird breeding biology. One of the islands' most threatened species in the early 1970s was the "Aleutian" Canada Goose (now "Aleutian" Cackling Goose, *Branta hutchinsii leucopareia*). These birds had not been seen from 1938 until 1962, when a small population of 200–300 was discovered on remote Buldir Island of the western Aleutians in 1963. The goose was listed as endangered in 1973, and Vern established and led the recovery team for its successful restoration in the Aleutians (Byrd 1998). Restoration measures included an extensive and intensive eradication of foxes (*Alopex lagopus* and *Vulpes vulpes*) that ultimately was to benefit many species of seabirds. These foxes had been introduced to many subarctic Alaska islands between the 1700s and the early 1900s for the purpose of harvesting pelts. Resident bird populations were decimated by these introductions, and island ecosystems were disrupted by the foxes, which persisted well after the fur trade stopped. By the mid-1980s, limited numbers of breeding "Aleutian" Cackling Goose were discovered on two Aleutian islands besides Buldir, and the species has shown a remarkable increase in recent years, with the current winter population now more than 80,000 birds. This dramatic recovery allowed the species to be removed from the Federal List of Endangered and Threatened Wildlife in 2001.

Vern left both the Pacific and seabirds in 1977 when he moved from Alaska to Colville, Washington (*American Birds* 31:364, 1977), where he briefly earned a living harvesting trees. Most important, it was there that he met Valerie Jane Russell. They were married in 1977 and became the parents of two sons, Matthew and Andrew. Although Vern may have been thinking about pursuing a career away from seabirds and the Pacific, the federal government had other plans and enticed him to move to Kauai, Hawaii, where he became Refuge Manager and Wildlife Biologist for the Hawaiian Islands NWR. There he initiated studies of seabirds at Kilauea Point NWR and set up a field station and initiated studies at Tern Island, French Frigate Shoals. Tom Telfer, John Sincock, and Vern also established a rescue program ("Save Our Shearwaters", or SOS) on Kauai for "Newell's" Shearwaters (*Puffinus auricularis newelli*), which were downed at night when confounded by light pollution (Telfer et al. 1987). They also developed a conservation program on Kauai for Laysan Albatrosses (*Phoebastria immutabilis*; Byrd and Telfer 1980). By today, the SOS program has saved more than 30,000 juvenile "Newell's" Shearwaters and is a model of how much good can result when local people become excited about conserving wildlife near their homes. Vern also conducted research on cross-fostering Newell's Shearwater chicks under Wedge-tailed Shearwater (*Puffinus pacificus*) parents in the protected Kilauea Point NWR (Byrd 1979, Byrd and Moriarty 1980, Byrd et al. 1984), in the event that heroic measures might have to be instituted to save that species. Years later this experiment was found to have worked, with at least two pairs of "Newell's" Shearwaters now breeding in the refuge and allowing the first highly-detailed research on the natural history and attendance patterns of these birds (Zaun and Hawkes 2005, 2006). Vern also used his experience with endangered species in Alaska to help prepare a recovery plan for Hawaiian Petrels (*Pterodroma sandvicensis*) and "Newell's" Shearwaters (USFWS 1983). In addition, he worked with taro farmers to enhance populations of "Hawaiian" Black-necked Stilts (*Himantopus mexicanus knudseni*), "Hawaiian" Common Moorhens (*Gallinula chloropus sandvicensis*), Hawaiian Coots (*Fulica alai*), and Hawaiian Ducks (*Anas wyvilliana*) at Hanalei (Byrd and Zeillemaker 1981, Byrd et al. 1985).

After three productive years in the tropical Pacific, Vern returned to Alaska in 1980 to work at the Yukon Delta NWR near Bethel, where he studied the diverse and abundant waterfowl of that region and established a seabird-monitoring program at Nunivak Island. It was in the same year that, under the Alaska National Interest Lands Conservation Act, the former Aleutian Islands NWR became the largest unit of the newly created Alaska Maritime National Wildlife Refuge (AMNWR).

In 1984 Vern became the biologist in charge of the Bering and Chukchi Sea units of the Alaska Maritime NWR. He spent most of the 1984–1987 field seasons in the Pribilof Islands, where his early duties included formalizing a seabird-monitoring program. He switched his attention back to the Aleutians in 1988 when he became the biologist at the Aleutian Islands Unit of the AMNWR, moving his family to Adak. While there, he formalized a seabird-monitoring program for the Aleutians, collaborated on seabird research projects with a wide range of agency and academic researchers, and continued the fox-eradication program that was so important in the restoration of seabird colonies. As a result of eradication supervised by Vern, non-native foxes remain on only three refuge islands in the Aleutian chain, and hundreds of thousands of seabirds now nest where foxes excluded them until recently. During his tenure as Aleutians Unit Biologist at AMNWR, Vern earned his Master's of Science degree from the University of Idaho on the statistical analysis of seabird monitoring in the Pribilof Islands (Byrd 1989).

In 1992, Vern became Supervisory Wildlife Biologist for the entire AMNWR and moved his family to

Homer. His concern now is the estimated 40 million seabirds that use lands of the Alaska Maritime National Wildlife Refuge—approximately 80% of all seabirds nesting in North America. He has instituted a formal seabird monitoring program for the entire refuge and has expanded collaboration on seabird research (including participation in *Exxon Valdez* oil spill studies). He initiated a more ambitious and extensive research program on seabirds, both on breeding islands and at sea, through the use of the refuge's research vessel, the M/V *Tiglax*. He also has expanded the removal of exotic mammals to include introduced rodents. As a result of Vern's work, seabird research in the Aleutians has developed exponentially, as investigators have found eager collaboration with the Refuge's personnel and support from their facilities, experience, and expertise.

Those who knew Vern in the 1970s and 1980s were always afraid that the bureaucracy would haul him back to Washington, DC—to the biologists' graveyard in some imposing building where he would never see another seabird or Alaska again. Certainly, the upper-level administrators were aware of his talents and used them. Vern was coauthor of the National Wildlife Refuge System's Vision Document, "Fulfilling the Promise," and he chaired the Action Team that developed a process for setting wildlife and habitat goals for the National Wildlife Refuge System for the next several decades. He has served on four Endangered Species Recovery Teams: the "Aleutian" Cackling Goose, Hawaii Forest Birds, Hawaii Waterbirds, and the Steller Sea Lion (*Eumetopias jubatus*). Fortunately, Vern has remained in Alaska and, rather that having any firm plans to head "back east," has his own view of what might come next. Displayed prominently on the wall over his desk is a framed Reeve Aleutian Airways one-way ticket from Homer to Adak, with a notice that advises: "In case of emergency, break glass and use as required."

Those who know Vern, especially those fortunate enough to have spent time in the field with him, are familiar with his ability to maintain a positive attitude in the face of daunting weather, major logistical hurdles, and bureaucratic logjams. We are struck by his ability to organize a team of diverse people into one that focuses on understanding and solving a particular problem, simply by his sheer enthusiasm and leadership. Further, his far-ranging interests and ability to work with others is shown by the sheer diversity of coauthors in the publications listed below. His genuine enthusiasm for every new day (especially when in—although by no means limited to—the Aleutians), and his innate qualities of credibility and likeability, are recognized widely by both researchers and administrators. These qualities have allowed him to make unique contributions to seabird science and conservation. His commitment to avian conservation is reflected in the fact that he was awarded the M. E. "Pete" Isleib Award in Avian Conservation at the 1996 Alaska Bird Conference. Vern's ability to keep a foot in both the research and management worlds also greatly increases the quality and value of the work he does in both realms. PSG has been honored to watch his career and contributions in the past, and we know that his continuing concern for, and interest in, North Pacific seabirds and the islands they occupy will allow him to continue contributing in the future.

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SPECIAL ACHIEVEMENT AWARD: MARK J. RAUZON

Craig S. Harrison

The Pacific Seabird Group presented a Special Achievement Award to Mark J. Rauzon at its annual banquet in Girdwood, Alaska, on February 18, 2006 "in recognition of innovative and sustained contributions to island restoration and the conservation of seabird biodiversity."

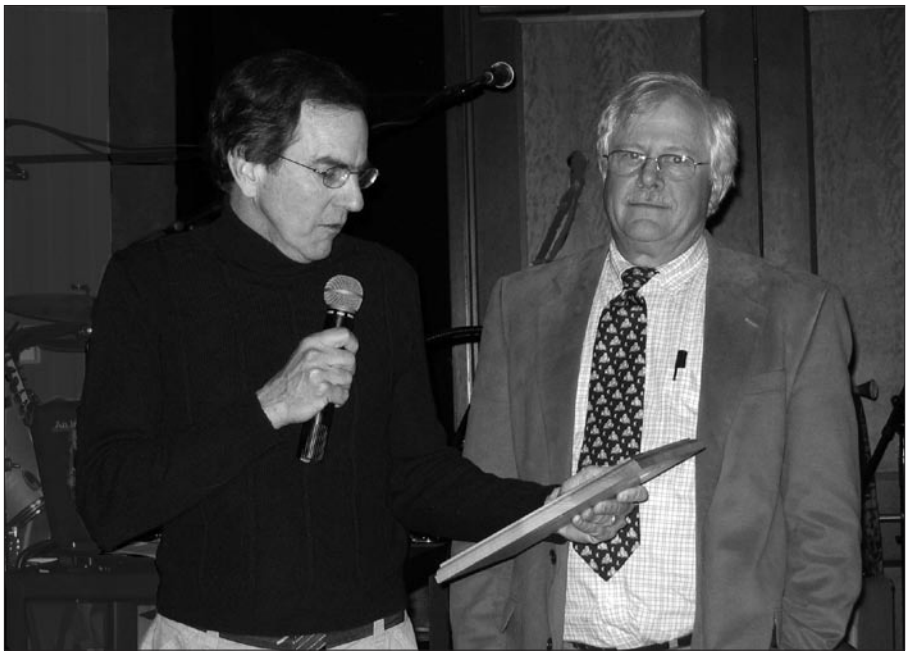
In 1993, PSG instituted its "PSG Special Achievement Award" which recognizes an individual who has performed outstanding, long-term service for the Pacific Seabird Group, or who has achieved an outstanding and significant exemplary accomplishment for the betterment of seabird research, education, and/or conservation. Mark joins six others who have previously received this award: Malcolm Coulter, George J. Divoky, Craig S. Harrison, Hiroshi Hasegawa, Arthur L. Sowls, and Steven M. Speich.

Among Mark's accomplishments include his pioneering work in restoring seabird colonies that have been eliminated by introduced predators, his achievements as a scientist, his work in environmental education, and his service to PSG. Mark is a self-employed writer, photographer and biological consultant. His award-winning books are a pleasure to read and his photographs have graced innumerable magazines and books. Mark's career proves that while it may not always be easy, it is possible to successfully pursue a career in seabird science and conservation without being employed by a university or government agency.

Mark was born and raised in the suburbs of Philadelphia. As with many members of PSG, Mark was first drawn to biology by his keen interest in birding, an avocation that he continues to enjoy immensely whenever opportunities arise. He spent his summers with his uncle and aunt in Anchorage in 1971 and 1972. He recalls seeing groups of people in Mt. McKinley Park with binoculars, and became intrigued to understand what was so fascinating about birds. He honed his birding skills while a student at Albright College, a small liberal arts college in Reading, Pennsylvania, where he earned a degree in Psychobiology in 1974. He led tours in Kotzebue, Alaska, during the summers of 1973 and 1974, which whetted his appreciation for seabirds.

In 1975, Mark was working in Nome as a tour guide when opportunity knocked. A new division of the U.S. Fish and Wildlife Service (USFWS), the Office of Biological Services (OBS), was gearing up for a massive effort to gather information about all aspects of seabirds on Alaska's outer continental shelf. There were tentative plans to lease much of the submerged lands off Alaska's coast for oil and gas development, and the newly-enacted National Environmental Policy Act required the federal government to assess the environmental implications of engaging in such an enterprise. Mark was hired along with a small army of biologists. This became a stepping stone to a life long interest in seabirds and seabird conservation. When I joined OBS in July 1975, Mark was one of the "old hands" who greeted me, having started to work one pay period (2 weeks) before me. Neither of us had yet joined PSG, which had just been founded in 1973.

SPECIAL ACHIEVEMENT AWARD - Mark J. Rauzon



MARK RAUZON: With Laysan Albatrosses; as hunter of non-native cats on seabird island; receiving Special Achievement Award from Craig Harrison; with wife Suzanne at awards banquet.

Mark worked for USFWS from 1975 until 1980. During his first field season he had numerous seabird adventures, including seabird surveys while dodging storms in the Bering Sea aboard the NOAA ship *Miller Freeman* and a stint as a naturalist (somehow paid for by USFWS) aboard the *Lindblad Explorer.* His colleagues assumed he spent his time on the *Lindblad Explorer* sipping champagne and eating king crab, in sharp contrast to the field work we were undertaking -- and they were right! Mark then worked on sea otter (*Enhydra lutra*) surveys in Prince William Sound with USFWS biologist Ancel Johnson. His great love for Alaska blossomed, and although he did not live there for long, he returned many times, including seabird surveys of St. Lawrence Island in 1997 and assessments of the damage that rats had inflicted on auklets on Kiska Island in 2000.

Surveys on the sea otter, one of the few mammals that "belonged" to USFWS under the Marine Mammal Protection Act instead of to the National Marine Fisheries Service, opened the door to work in Hawaii in 1977. Mark was invited to work on the monk seal (*Monachus schauinslandi*) project in the Northwestern Hawaiian Islands and became fascinated with tropical seabirds and albatrosses on French Frigate Shoals and Kure Atoll. He was trained by Karl Kenyon, the first recipient of PSG's Lifetime Achievement Award, who became Mark's friend and mentor. As it turned out, Mark put in a good word for me with the refuge manager of the Hawaiian Islands National Wildlife Refuge, which helped me get hired as the refuge's seabird biologist in early 1978. We worked together for several years, including cruises that allowed us to visit exotic locations such as Necker Island, Laysan Island, Lisianski Island, and Pearl and Hermes Reef to survey seabird populations and gather food samples. In 1979, Mark spend much of his winter in a primitive field camp on Nihoa Island to gather the material for the first breeding biology studies of blue-gray noddies (*Procelsterna cerulea*) (Rauzon et al. 1984) and sooty storm-petrels (*Oceanodroma tristrami*) (Rauzon et al. 1985).

Mark entered the University of Hawaii's Geography program, where he earned an MA in 1983. His research project set a new standard in seabird conservation. In 1982, Mark spent six weeks on Jarvis Island, a remote speck of land near the Equator that once had vast populations of tropical seabirds, in an attempt to remove introduced cats that had decimated the seabirds. The living situation was, to put it mildly, bleak. Jarvis is about 1.6 square miles of coral rubble and bird guano, standing 25 feet above sea level atop an extinct volcano. He was accompanied by David Woodside, a legendary biologist from Hawaii. The hot sun reflects off the coral and sand with a blinding white heat, without a single tree to create a soothing shadow. It was so hot that both the hunters and the hunted did their work only at night. Yet his night hunting generally succeeded, with only three elusive cats remaining alive (Rauzon 1985). Mark returned in 1990, and shot the last cat on Earth Day, eliminating a predator that had wreaked havoc on the bird populations. When Mark returned in 2004, he found that eliminating cats had allowed nature to take its course and that six species had recovered dramatically: blue-gray noddies, brown noddies (*Anous stolidus*), gray-backed tern (*Sterna lunata*), white-throated storm-petrels (*Nesofregatta albigularis*), Audubon's shearwaters (*Puffinus lherminieri*), and Christmas shearwaters (*Puffinus nativitatis*). Some of the changes are remarkable. Only two blue-gray noddies were seen in 1982, and in 2004 there were 600. Brown Noddies had multiplied from a handful to over 300 birds by 1996, and in 2004 the population had reached almost 10,000. Mark's efforts (helped by other USFWS hunters like Doug Forsell) essentially created a new tropical seabird colony in the middle of nowhere—Jarvis Island is now the largest seabird colony in the Central Pacific. His work is a testimony to the fact that given appropriate protection and some time, most seabird species are sufficiently resilient that their populations can rebound admirably.

These accomplishments at Jarvis Island soon inspired many others to concentrate on restoring seabird colonies. Much of the predator control work in Mexico that is geared toward restoring seabird colonies can trace its genesis to the inspiration that Mark provided. During his tenure as chair, PSG received the first North American Free Trade Agreement (NAFTA) grant from USFWS. At PSG's 1995 annual meeting in San Diego about 40 Mexican biologists and wildlife managers were trained by Mark and a team of New Zealanders in state-of-the-art predator control techniques. Mark was instrumental in providing a catalyst for seabird restoration in Baja California.

Throughout his career, Mark has continued his focus on restoring and creating habitat for seabirds. He worked extensively with the Marine Corps during the 1980s to improve the management of Hawaiian stilts (*Himantopus himantopus knudseni*) by removing invasive red mangroves (*Rhizophora mangle*) at Kaneohe Marine Corps Air Base. In the 1990s he worked on the bridges that span San Francisco Bay, learning the behavior of Double-crested Cormorants (*Phalacrocorax auritus*) and designing nest structures for a new bridge so they may coexist with a vast human population. For two decades after Jarvis, he worked with Bill Everett and his Endangered Species Recovery Council to remove cats from Wake Island, achieving another success for tropical seabirds. His work on Christmas Island in 1992 included an attempt to control cats with a virus, which he transported through Hawaii at great personal risk. While he possessed what seemed to be appropriate documentation, a suspicious bureaucrat at the airport might have foiled the attempt and any errors in paperwork might have resulted in a $25,000 fine. Mark's consulting work to successfully remove rodents from Helen Atoll, Palau, led to designing an entirely new type of elevated rodent bait

stations for islands where crabs consume the bait.

Mark's interest in improving seabird and other wildlife habitat has extended to working with government agencies to help them plan to improve the management of parks, refuges and other protected areas. Among his accomplishments are work on a contingency plan for rodent invasions in the Northwestern Hawaiian Island and Remote Pacific Islands National Wildlife Refuges, the general management plan of the Hawaiian Island National Wildlife refuge, and the USFWS Regional Seabird Plan for the Pacific states.

Mark has managed to get most anywhere that seabirds can be found in the Pacific, either on a genuine work assignment or on a natural history trip. In addition to the locations already mentioned, he has participated in seabird inventories and monitoring in American Samoa, the Central Pacific atolls, remote Alaska and even the Farallon Islands. His travels have also taken him to Papua New Guinea, Burma and Peru.

In addition to all his other work, Mark's contributions to environmental education have been exemplary. He has written 17 children's books, including titles such as *Seabirds* and *Jungles*, have helped to instill an interest in wildlife and the environment in youngsters. Magazine articles such as "Tropical Island Seabirds -- Some Conservation Considerations" in *Birding Magazine* have provided the wider conservation community with an appreciation of the types of efforts that are needed to protect and restore the biodiversity of remote Pacific islands. Mark's *Isles of Refuge: The History and Wildlife of the Northwestern Hawaiian Islands* was a watershed event. Highly praised by the seabird community (Harrison 2001, Mendenhall 2001, Scaglion 2001/2002,), this volume also received the 2002 Award for Excellence by the Hawaii Book Publishers Association as well as honorable mention in excellence in science and excellence in illustration.

Mark is currently working on a new volume, *Isles of Amnesia*, concerning the American involvement in remote and obscure possessions and territories in Polynesia (American Samoa, Baker, Howland, Jarvis, Johnston Atoll, Palmyra, Rose Atolls, Wake). He will focus on human disturbance due to the intentional or accidental release of alien plants or animals on fragile ecosystems during the nineteenth century exploration and exploitation era, as well as the events associated with World War II. Mark addresses the fundamental questions about conservation and restoration from the viewpoint of hands-on work with invasive species. What mistakes have been made, and how do we correct for them? What are the ethics of killing some animals to save or preserve others? Why is "weeding Eden" necessary? Is removing invasive predators from fragile island ecosystems different from controlling rats in urban neighborhoods, gopher controls on orchards, or removing harmful microbes from otherwise healthy bodies? His book will assist the future restoration of many of the disturbed ecosystems on Pacific islands simply by bringing attention to them.

Mark lives in Oakland with his wife Suzanne. We congratulate him for his achievements to date, and look forward to many more years of his contributions to seabird science and conservation.

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CONSERVATION REPORT

Craig S. Harrison

NORTHWESTERN HAWAIIAN ISLANDS DECLARED A NATIONAL MONUMENT

The remote islands of Hawai'i are now in the Northwestern Hawaiian Islands Marine National Monument, under a proclamation on 15 June 2006 by President George W. Bush. The monument protects an archipelago that is 1400 miles (2240 km) long and stretches from Nihoa Island, just northwest of Kauai, to Kure Atoll. The area includes a 100-mile (160 km) wide strip of islands, coral reefs, and adjacent deep ocean.

The area is home to 7000 species of birds, fish and marine mammals, a quarter of them unique to Hawaii. These include millions of seabirds, the endangered Hawaiian monk seal (*Monachus schauinslandi*), and sea turtles. The land area is largely uninhabited—the only regular human visitors to the islands are USFWS researchers. Others with interests in the area include Native Hawaiians, because of traditional archeological and religious sites, commercial fishermen, and airlines for which Midway Atoll can provides an emergency runway.

The White House's press release (15 June 2006) says that the National Oceanographic and Atmospheric Administration (NOAA) will oversee management of the national monument, with input from other federal agencies and the state of Hawaii. USFWS will continue to manage wildlife refuges within the monument. Commercial fishing will be phased out during a five-year period. Access to most islands and waters will be restricted to protect natural resources. Access will be permitted for Native Hawaiian cultural activities; and a public visitation center will be maintained on Midway Atoll, in part so that people can see its World War II sites.

Conservationists and biologists have been surging protection of the northwestern Hawaiian Islands for more than two decades (Craig S. Harrison, "A Marine Sanctuary in the Northwestern Hawaiian Islands: An Idea Whose Time Has Come"; *Natural Resources Journal* 25:317, 1985). PSG has long supported the effort, writing three letters to NOAA officials in 1991-1994 and recruiting other conservation groups to help. President Clinton designated the northwestern Hawaiian islands a Coral Reef Ecosystem Reserve in 2000, and he ordered NOAA to begin evaluating the area as a National Marine Sanctuary. NOAA has been working on a draft EIS for a marine sanctuary since 2002 and has held over 100 meetings and public hearings. Hawai'i Governor Linda Lingle (R) has been active in promoting the federal sanctuary (*Pacific Seabirds* 32:14, 2005), and the state established a Northwestern Hawaiian Islands Marine Refuge in fall 2005. The state's rules prohibited commercial and recreational fishing within state waters (out to three miles off shore) and required permits for other activities. President Bush decided to declare the national monument now, rather than wait for the impact statement procedure to finish, because of support from the state of Hawai'i and the public. The conservation community is commending President Bush for his action.

The closure to commercial fishing is still a contentious issue. Kitty M. Simonds, executive director of the Western Pacific Fishery Management Council, stated that the group would fight for continuation of bottom fishing (*New York Times,* 15 June 2006). However, only 8 boats are licensed to fish in the area at present; and fishing in the area could compromise its ecological integrity, including the risk of introducing destructive plants or insects to pristine islands.

There was tourism on Midway Island from 1996 to 2002, and visitor facilities already exist there (V.M. Mendenhall, *Pacific Seabirds* 28:2, 2001; *Pacific Seabirds* 29:10, 2002). Resuming tourism on Midway could allow a superb environmental education program, and the public could appreciate one of the nation's most spectacular seabird colonies. Visitors also need to see historic artifacts. But it will be crucial to place the highest priority on protection of breeding species and sensitive habitats. When Midway was open to tourism previously, many paths and beaches were closed to prevent disturbance of seabird colonies, sea turtles, and Hawaiian monk seals. PSG will be watching developments in the new national monument with great interest.

GOVERNMENTS ASK FOR MORE MONEY FROM EXXON MOBIL TO CLEAN UP *EXXON VALDEZ* OIL

The U.S. Department of Justice and the state of Alaska announced on 1 June 2006 that they are seeking another $92 million from Exxon Mobil Corp. to identify and remove residual oil from shorelines in Prince William Sound and the Gulf of Alaska. The governments are reopening the 1991 settlement of their civil suit against Exxon. A "reopener clause" in the settlement allowed the governments seek up to $100 million more from Exxon-Mobil if habitats or populations are still impacted in ways

that could not reasonably have been anticipated in 1991. A formal demand will be filed by 1 September 2006.

Shoreline surveys conducted during summer 2005 showed that oil from the 1989 *Exxon Valdez* spill lingers below the surface in areas outside of Prince William Sound, according to a scientific study reviewed at a January 2006 conference in Anchorage (see report on the 2005 conference in *Pacific Seabirds* 32:16, 2005). The study included parts of Katmai and Kenai Fjords National Parks and found that oil remains trapped beneath boulder-strewn shorelines in the same mousse-like condition as when it arrived there. The study focused on areas outside Prince William Sound, and the authors were surprised to find relatively fresh oil as far away as Katmai, on the Alaska Peninsula about 480 km southwest of the grounding site.

Surveys of remnant oil within Prince William Sound have consistently revealed more oil than expected. Surveys in 2001 of areas that had been heavily oiled led to an estimate that about 55 tons of *Exxon Valdez* oil remained on Prince William Sound beaches, but surveys in 2003 revealed that much more oil remained buried in the lower half of the intertidal zone than was expected. Most recent surveys focused on areas that were lightly oiled, and even they have lingering oil. NMFS concluded in May that about 100 tons of oil still contaminate patches that total almost 10 km of shoreline around Prince William Sound.

In most places, the oil does not appear to pose an immediate danger. For example, even on heavily oiled sites, mussels (*Mytilus* sp.) on the surface above the oil appear to be clean. However, creatures such as sea otters (*Enhydra lutra*) and Harlequin Ducks (*Histrionicus histrionicus*) that dig into shoreline substrates are still at risk of encountering oil if they disturb sediment in search of their prey.

The shorelines' rocky characteristics are ideal for trapping buried oil, because they are not truly beaches in the geological sense. They are not composed of sand that is deposited and eroded by wave action over time, but rather are composed of cobbles and large rocks overlying some sand and a shallow layer of bedrock. The rocky layers lock the oil in place. Among the options to rid the shorelines of lingering oil are excavation and removal to a landfill; use of biological nutrients to help the oil degrade more quickly; and simply letting nature degrade the oil over time.

Some believe that active cleanup of lingering oil would do more harm than good. Cleanup techniques carry risks, and a 2002 examination of shorelines that were cleaned in 1989 with hot water under high pressure found that populations of clams and mussels remained impaired. Study results indicated that high-pressure hot-water washing did considerable damage to inter-tidal sediments and was worse for bivalve colonies than the oil exposure itself. Those techniques, however, benefited other creatures at the time they were employed.

The recent findings indicate that exposure to *Exxon Valdez* oil continues to have an impact on many shore-dwelling animals and is contributing to their slow recovery in some parts of Prince William Sound. Exxon Mobil questions these conclusions and contends that Prince William Sound has recovered, is healthy and is thriving.

Under the original *Exxon Valdez* settlement that was signed in 1991, Exxon paid $900 million to state and federal governments over a 10-year period ending in 2001, as compensation for damages caused by the 11 million gallons of oil that spilled when the their tanker went aground on 24 March 24 1989.

PETITION TO REMOVE CALIFORNIA BROWN PELICAN FROM ENDANGERED LISTS

On 14 December 2005, the Endangered Species Recovery Council submitted formal petitions to remove the California Brown Pelican (*Pelecanus occidentalis californicus*) from the list of species covered by the US and California state Endangered Species Acts (ESAs). In late May 2006, the U.S. Fish and Wildlife Service (USFWS) announced that the petition "presents substantial scientific or commercial information" and that delisting "may be warranted" (*Federal Register* 71[100]:29908, 24 May 2006). Under the ESA, USFWS is required to make a final determination by December 2006, and the agency has solicited information on this subspecies and other Brown Pelican subspecies to assist its decision. The state of California has also begun to evaluate the petition.

Since the California Brown Pelican was listed as endangered in 1970, its breeding success has improved greatly and its population has increased. A major factor in this improvement was the prohibition on use of DDT in 1972.

Opinions among biologists vary somewhat on the issue of delisting the California Brown Pelican. All agree that the species is in much healthier condition than in the 1970s. Some believe that conservation efforts in the U.S., as well as in Mexico (where the majority of California Brown Pelicans nest), can continue to protect it well, and that endangered species funding should be shifted to other issues. [Also see "Forum" item in this issue.] Other experts are concerned that the pelicans may come under threat from continuing problems, such as limited breeding distribution, impacts from fishing, and changes in the ocean ecosystem. A third option under the ESA, in addition to removing the pelican from the list or retaining its endangered status, would be to "downlist" it—to redesignate it as a threatened species. The Executive Council has requested information and data from various parties, and it will consider its the next meeting whether adopt a PSG policy on the delisting.

MORE SHORT-TAILED ALBATROSSES APPEAR OFF WEST COAST

In late July 2005, Ben Saenz and Jason Yakich recorded an apparent juvenile Short-tailed Albatross (*Phoebastria albatrus*) in the Gulf of the Farallones during a PRBO research cruise due west of Middle Farallon Island at the continental shelf break. A Short-tailed Albatross also was seen on 12 August 2005 out of Monterey on a Shearwaters Journey trip. In September 2005, a juvenile was recovered from Oregon coast that had been banded by Hiroshi Hasegawa as a chick at Torishima Island, Japan on 22 April 2004. A juvenile also was photographed by Koji Ono in the Santa Barbara Channel during a PSG field trip in February 2002 (*Pacific Seabirds* 29:2, 2002).

Hasegawa notes that the Short-tailed Albatross population on Torishima has increased in numbers at 7.6% per year (doubling in 9.5 years) and is now estimated at about 1,700 birds. The second breeding population in the Senkaku Islands is also increasing, with a population of about 300 birds. With a world population of about 2,000, the species seems to be expanding its marine range.

RECORD ALBATROSS NUMBERS TALLIED AT MIDWAY ATOLL

The USFWS has issued its report on the annual count of Laysan and Black-footed Albatross (*Phoebastria immutabilis* and *P. nigripes*) nests at Midway Atoll National Wildlife. Volunteers carried out the count during a three-week period December 2005 and January 2006. Numbers for both species have increased to the highest levels since the count began in 1991. A total of 511,612 nests were counted. This including the fifth year of increasing Black-footed Albatross numbers, following a minor decline in the 1990s. The total number of nests counted was 487,527 (Laysan Albatross) and 24,085 (Black-footed Albatross).

The 2005-6 count is the 6th complete assessment of Midway's nesting albatrosses in the last fourteen years. Though numbers have fluctuated somewhat from year to year, the previous record nest counts were 441,178 Laysan Albatross nests in 2003 and 21,645 Black-footed Albatross nests in 1996. For reasons that seem based more on theoretical considerations than the status of the population, the International Union for the Conservation of Nature considers Black-Footed Albatrosses to be an "endangered" species. USFWS recently rejected a petition to list this species as endangered under federal law.

CASPIAN TERN MANAGEMENT UPDATE

PSG, along with the Seattle Audubon Society, American Bird Conservancy, National Audubon Society, Defenders of Wildlife, and Oregon Natural Resources Council wrote USFWS to express concerns over plans to begin dispersal of the Caspian Tern (*Sterna caspia*) colony on East Sand Island in the Columbia River estuary. We asked that the current management efforts to create at least 6 acres of nesting habitat at East Sand Island be continued, without any diminishment in colony size, until a variety of issues have been addressed.

1. No alternative habitat has been established for Caspian Terns that the agency proposes to displace from the East Sand Island colony. While alternate breeding sites such as at Willapa Bay and Gray's Harbor were considered in 1999, no alternative sites have been prepared, even though 77 alternate sites have been identified and evaluated. In addition, in February 2006, NOAA–Fisheries (NMFS) issued a Biological Opinion addressing the impacts that relocating most of the East Sand Island Tern colony would have on salmonid species that are listed under the ESA. Seven alternative sites had been chosen under an environmental impact statement (EIS) on Caspian Tern management. However, NMFS has eliminated all sites listed in the EIS from consideration, except for two in the San Francisco Bay, over 600 miles away from the colony. Without suitable nesting habitat near East Sand Island, no terns should be dispersed.

2. Caspian Tern numbers are stable or declining. The most recent data from researchers at Columbia Bird Research documents that the population in the Columbia estuary has been stable over the last 8 years, not increasing as predicted. The 2005 count of 8,822 pairs of Caspian Terns on East Sand is 7% below the 2004 numbers of 9,502 pairs and substantially below the 12,000 pairs predicted for 2005 in the EIS.

3. The goals for predation on listed salmonid species have nearly been met. In 2005, the diet of East Sand Island Terns had been reduced to 23% salmonids, down from 74% at Rice Island in 1998. (Terns were dispersed from Rice Island to East Sand Island in an effort to reduce their predation on salmonid smolts.) Consumption of salmonids by the East Sand Island tern colony in 2005 was approximately 3.6 million smolts, about 9.0 million fewer smolts consumed compared to 1998 (71% reduction), when all terns nested on Rice Island. Since tern management actions began in 1999, the overall reduction in salmonid consumption has been more than 36 million salmon smolts.

4. Ownership of East Sand Island is still not resolved. The settlement agreement in the law suit against the U.S. Army Corps of Engineers (COE) stipulated that USFWS and COE were to issue a joint recommendation on future ownership of East Sand Island and also make recommendations for funding of management on the island. This issue remains unresolved, and we urged USFWS to add East Sand Island to the Oregon Islands National Wildlife Refuge.

5. An EIS is required before any management actions on cormorants (*Phalacrocorax* spp).

The annual maintenance of about 6.5 acres of Caspian Tern nesting habitat on East Sand Island was again performed by the COE in late March 2006, and terns have been arriving on the colony site as they normally do at this time of year. Although so far there has been no development of alternative Caspian Tern colony sites outside the Columbia River estuary, as described in the Final EIS, there has also been no reduction in tern nesting habitat on East Sand Island. In addition, three sites in Oregon are still considered possibilities as alternative habitat: Summer Lake, Crump Lake, and Fern Ridge Reservoir. It is unclear whether the 680-pair colony at the Dungeness National Wildlife Refuge is safe, or whether it can it be eliminated as part of the management plan.

IS THE MARBLED MURRELET'S DECLINE LINKED TO FISHERIES COLLAPSE?

Marbled Murrelets (*Brachyramphus marmoratus*) may be feeling the effects not only of losing the coastal forests where they nest to logging. They may also be affected by the disappearance the high-quality, high-fat foods they rely upon due to overfishing, according to Steve Beissinger, professor of conservation biology at the University of California, Berkeley. His research offers some clues to why murrelets are failing to reproduce successfully. In some years as many as 90 percent of murrelets do not nest. In good years, only about half of the birds nest, and they do not always produce offspring. Researchers suspect the reason may be that murrelets are not ingesting enough nutritious, high-fat food to supply the nutrients and energy needed for successful reproduction.

When murrelets consume less nutritious foods, they spend more time diving to catch and eat them, and consequently they have less energy to produce and lay eggs. Researchers can determine what kinds of food murrelets are eating by analyzing their feathers. Feathers with higher levels of nitrogen isotopes are from birds that have eaten high-fat, high-energy foods such as sardines (*Sardinops*), anchovies (*Engraulis*), and squid. Feathers with higher levels of carbon isotopes are from birds eating less nutritious food sources such as krill (Euphausiidae), sand lance (*Ammodytes*), and young rockfish *Sebastes*).

A comparison of murrelet feathers from 1895 to 1911 with feathers collected between 1998 and 2002 in the same region indicate that a century ago the birds had a much more nutritious diet compared with modern birds. To rule out changing ocean temperatures as a cause for the differences, the biologists also compared the feathers from older birds and modern birds that had both been gathered during years the ocean was cool, making nutritious prey more abundant. Even when comparing these birds, the researchers found the modern murrelets had eaten 42 percent less high-nutrition prey than the older birds.

The scientists say the new research indicates that conservation efforts need to focus not only on the loss of coastal forests where the birds nest, but also on their prey base. The study was funded by the California Department of Fish and Game and USFWS and was published in the journal *Conservation Biology* (20:297, 2006).

OREGON COUNTY SUES TO REMOVE PROTECTIONS FOR MARBLED MURRELET

Coos County, Oregon, and the Pacific Legal Foundation sued the federal government in February in an effort to force USFWS to remove the Marbled Murrelet from the endangered species list. The county says it has lost economic opportunities because of the listing. At issue is whether the species' smaller Pacific Northwest population is linked with the more robust populations in Canada and Alaska. Some estimates indicate that there are about 17,000 to 20,000 murrelets living off the coasts of California, Oregon and Washington, compared to nearly 1 million in Canada and Alaska. Currently the Pacific Northwest murrelet is protected under the ESA because the population is considered to be a distinct segment.

The plaintiffs argue that the two populations are linked and that therefore the Pacific Northwest birds should not have special protection. There has been conflict in the federal administration on whether the Pacific Northwest population is indeed different from that in British Columbia and Alaska. Regional scientists have said the populations are separate and warrant ESA protection, but the agency's official announcements have been that the birds do not meet the standard for listing as a distinct population segment. FWS officials announced in late 2005 that FWS would consider delisting the bird this year.

ANTS ATTACKING SEABIRDS ON ISLETS OFF OAHU

Mokoli'i Island, better known as Chinaman's Hat, hosts a colony of Wedge-tailed Shearwaters (*Puffinus pacificus*) off the windward shore of Oahu. But the birds are driven away by hordes of fast-moving insects called yellow crazy ants (*Anoplolepis gracilipes*), which has caused a dramatic drop in the number of shearwaters that are laying eggs. The ants are a non-native species from Africa. They don't bite, but they excrete an acid which seems to harass the birds sufficiently that they abandon their nesting efforts. Until recently, this island was plagued by introduced ship rats (*Rattus* sp.), which have been eliminated by poisoning. The removal of the

rats has allowed more vegetation to flourish on the island, but this may have facilitated eruption of the non-native predaceous ants.

FIJI JOINTS RAT RACE

A team from New Zealand will begin a BirdLife Fiji Program project to eradicate rats on Vatuira Island, which holds internationally important seabird colonies and has been identified as an Important Bird Area. This is the second rat eradication that will be carried in Fiji in 2006; the other is the removal of rats on Viwa Island by a team from the University of the South Pacific. Rats are a serious threat to the native birds and wildlife in Fiji and other Pacific islands. Three species of rats have been introduced to Fiji. The Pacific rat (*Rattus exulans*) arrived thousands of years ago, and Norway and black rats (*Rattus norvegicus* and *R. rattus*) more recently. All have had devastating impacts on the biodiversity of Pacific islands and have led to the extinction of innumerable island species.

PSG COMMENTS ON *LUCKENBACH* OIL SPILL

PSG commented on the draft Restoration Plan/Environmental Assessment for the oil spill from the *Jacob Luckenbach* and associated mystery spills, which was issued in February 2006. The restoration plan proposes to spend oil-spill restoration funds for damage to seabirds and other natural resources related to multiple oil spills that occurred off the coast of San Francisco from 1990 to 2003.

PSG generally supported the plan. It endorsed the following projects: (1) protection of nesting habitat of nesting Pacific Loons (*Gavia pacifica*), Red-throated Loons (*Gavia stellata*), and Red Phalaropes (*Phalaropus fulicaria*) at Kokechik Flats, Alaska; (2) protection of Western/Clark's Grebe (*Aechmorphorus occidentalis* and *A. clarkii*) nesting colonies at northern California lakes; (3) mouse eradication at the Farallon Islands to benefit nesting Ashy Storm-Petrels (*Oceanodroma homochroa*); (4) seabird restoration on Baja Islands to benefit Cassin's Auklets (*Ptychoramphus aleuticus*), California Brown Pelicans, and cormorants; (5) extending the current seabird colony protection program for Common Murres (*Uria aalge*) off the central California coast by 20 years; (6) a corvid management at Point Reyes National Seashore to improve nesting success of Common Murres; (7) restoration of the Reading Rock murre colony in Humboldt County, California; (8) a corvid management program in the Santa Cruz Mountains of California to improve Marbled Murrelet nesting success; (9) old-growth forest acquisition and protection to benefit Marbled Murrelets; (10) dune habitat restoration at Point Reyes National Seashore to create more nesting habitat for Snowy Plovers *Charadrius alexandrinus*); (11) Norway rat eradication in the Queen Charlotte Islands, Canada, to benefit Ancient Murrelets (*Synthliboramphus antiquus*); and (12) nesting habitat restoration on Año Nuevo Island, California to benefit Rhinoceros Auklets (*Cerorhinca monocerata*).

PSG also noted that the seabird project at three important breeding colonies of the Xantus's Murrelet (*Synthliboramphus hypoleucus*)—San Martín, San Jeronimo, and the San Benito Islands—would benefit that species, which the trustees did not find was injured by the spills.

SUCCESS IN THE GALÁPAGOS

Project Isabela reports that it has met all of its objectives and that northern Isabela Island, Galápagos Islands, is free of goats, pigs and donkeys. In 1997 there were between 100,000 and 150,000 goats in an area of around 250,000 square kilometers on north Isabela. This highly ambitious project has been an initiative of the Galápagos National Park and the Charles Darwin Foundation for the Galápagos Islands.

For more information please view http://www.hear.org/galapagos/invasives/topics/management/vertebrates/projects/pi.htm

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WILL THE ENDANGERED SPECIES ACT BE AMENDED?

The chairman of the U.S. Senate Environment and Public Works Committee intends to rewrite the ESA, despite the failure of a consultation group to reach consensus on a key habitat provision. James Inhofe (R-Okla.) said that the Senate should complete the legislative process that was begun last year in the House. The nonprofit Keystone Center had been commissioned to convene environmentalists and representatives of the commercial sector to find consensus on ESA habitat issues. The Keystone group supported legislative changes to ESA, but it could not reach agreement on the contentious issue of critical habitat. It did recommend elevating the role of the recovery plans that are required for each endangered species to become the central management tool for those species. It also said changes are needed in the incentives that encourage landowners to conserve habitat, and in a consultation process that currently discourages many landowners from coexisting with listed species on their land.

The ESA now requires federal officials to designate critical habitat for each species when it is listed. USFWS rarely does this, which has been the focus of many lawsuits. Some environmental groups hold up critical habi-

tat as crucial for species survival, but USFWS officials in current and past administrations have said it is one of the most expensive and least useful parts of the act. The bill that House Resources Committee Chairman Richard Pombo (R-Calif.) brokered through the House floor in autumn 2005 rescinded the critical habitat requirement in favor of voluntary recovery plans. Many environmental organizations object to the House bill.

A report on the ESA by the independent Government Accountability Office (GAO) appears to rebut some of Pombo's criticisms. Pombo has argued the ESA's recovery rates are "abysmal" because less than 1 percent of species have been delisted. The GAO report said that the ESA's success rate "is difficult to measure" because some species are not likely to recover for 50 years or more. "Simply counting the number of extinct and recovered species periodically over time, without considering the recovery prospect of listed species, provides limited insight into the overall success of the services' recovery programs," the report said.

The GAO recommends that federal officials estimate in recovery plans when recovery may be achieved and what it may cost. The lack of such estimates makes it difficult to measure the success of the ESA. In examining current recovery plans, the GAO found that over 70 percent lacked estimates on when a species might recover, and that few have cost estimates. It recommends USFWS report time and cost estimates in its annual Endangered Species report to Congress. USFWS service officials said they would add "general estimates" of time and cost in their 2006 report.

BRITISH COLUMBIA RENEWS PUSH FOR OFFSHORE EXPLORATION

Hoping to take advantage of all-time high oil prices, British Columbia is trying to persuade the Canadian government to lift a 34-year ban on offshore oil and gas exploration. British Columbia Energy Minister Richard Neufeld said that there may be an estimated 10 billion barrels of oil and 40 trillion cubic feet of natural gas in deposits off the Queen Charlotte Islands. The new Conservative federal government of Prime Minister Stephen Harper says it has no plans to alter the federal moratorium on offshore drilling, according to the Natural Resources Minister Gary Lunn. Before joining the federal cabinet in early 2006, Lunn favored drilling but said that more precise estimates on British Columbia's potential are needed.

UNDERSEA CABLE TO TRANSPORT WIND POWER FROM OREGON TO CALIFORNIA

Pacific Gas & Electric may build a $1 billion undersea cable to transport hydroelectric and wind power to California from the Pacific Northwest. The cable would facilitate the development of wind turbines that might impact seabirds and other marine wildlife. The cable would begin north of Portland, Oregon, and would be buried about three miles offshore. The plan would reduce the need for new power plants and meet the 2010 deadline by which California utilities must generate 20 percent of their power from renewable fuel sources. The cable would have the capacity to transport 1,600 megawatts of power to the San Francisco Bay Area, enough for 1.2 million homes. Canadian developer Sea Breeze Power would lay the undersea cable, which was initially intended to provide a link from British Columbia wind farms to California's high demand for renewable energy. The cable would be the longest underwater electric cable ever constructed.

THEY CAME TO DO GOOD, AND ARE DOING VERY WELL

Annual salaries of senior officials of conservation are available to the pubic, and from time to time PSG reports them (for a previous report see *Pacific Seabird Group Bulletin* 19:52, 1992). Of interest are these: John H. Adams, President of the National Resources Defense Council, $704,796; Steven Sanderson, CEO of the Wildlife Conservation Society, $495,422; Mark Van Putten, President of the National Wildlife Federation, $477,138; Steven McCormick, CEO of The Nature Conservancy, $399,788; John Flicker, President of National Audubon Society, $ 362,237; Peter Seligmann, CEO of Conservation International, $336,3353; Russell Mittermeier, President of Conservation International, $331,515; Kathryn Fuller, President, World Wildlife Fund, $310,781. For the record, PSG's chair earns $0.0.

MEETING NEWS

33RD ANNUAL MEETING OF PSG, GIRDWOOD, ALASKA

PSG held its 33rd Annual Meeting on 15–19 February 2006 at the Alyeska Prince Hotel and Resort, in Girdwood, Alaska. Located approximately 40 miles southeast of Anchorage, Girdwood boasts a ski resort and world-class scenery. This was the largest PSG meeting in our history (284 registered attendees from 12 countries) aside from joint meetings with other societies. The meeting's success reflected the high quality of the scientific program and excellent preparations by the Local Organizing Committee.

The scientific program was extremely strong and varied this year. The meeting's primary theme was the symposium "Seabirds as indicators of marine ecosystems," which was convened by John Piatt and William Sydeman. Attendance by some speakers at this symposium to attend was supported by the North Pacific Research Board, and PSG will be providing a report to the NPRB on conclusions that were reached during the symposium. There also were three special paper sessions: (1) "Seabird–fisheries interactions," which was coordinated by Falk Huettmann; (2) "What chemical analyses can tell us about seabirds and marine ecosystems," coordinated by Stacy Vander Pol; and (3) "Ecology of planktivorous alcids," coordinated by Ian Rose.

Three plenary lectures were presented. On Thursday morning, Keith Reid of the British Antarctic Survey presented a talk entitled "Seabirds as indicators of marine ecosystems: from ringing bells to finding solutions" for the "Seabirds as indicators" Symposium. On Friday morning, Vern Byrd of the Alaska Maritime National Wildlife Refuge presented "A history of seabird studies in Alaska," and on Saturday morning, Aevar Petersen of the Icelandic Institute of Natural History presented "Arctic seabird coop-

TRAVEL AWARD RECIPIENTS AT THE PSG 2006 ANNUAL MEETING. Above, student awardees; below, non-U.S/non-Canada award recipients.

THE SKUA SKI/SNOWSHOE CLASSIC at the 2006 Annual Meeting. Individual ski race—starting lineup, race in progress; on right, three-legged snowshoe racers Paul Anderson and Verena Gill.

eration: monitoring, status, and trends." In addition, two lunchtime talks were given under the "Seabirds as indicators" symposium: Tony Gaston presented "Seabirds as indicators of marine ecosystem change" on Thursday, and Julia Parrish presented "Dead birds don't lie, but what are they telling us?" on Saturday. The Conservation Committee meeting, led by Craig Harrison, took place during Friday lunch. In addition, a reception/poster session was held on both Thursday and Friday evenings.

The meeting was not all science, however. At the Thursday evening reception, the King Island Dancers performed traditional Inupiat Eskimo dances, and many of the conference attendees happily accepted the performers' invitation to join in. The "Skua Ski/Snowshoe Classic" race was held on Friday evening on a snowy meadow near the hotel. Champions in the individual cross-country ski race were Alan Springer in the men's division and Heather Wilson in the women's division. Winners in the team race were Dave Ainley, Britt Harter, Ed Murphy, and Alan Springer in the men's division, and Naomi Bargmann, Lisa Haggblom, Katie Murra, and Heather Wilson in the women's division. The winners of the Three-legged Snowshoe Race (in which a couple tied two legs together and attempted to race on three snowshoes) were Carina Gjerdrum and Karel Allard, who managed to avoid the mass pileup in the bushes that took out most of the front-runners.

At the Banquet on Saturday night, PSG presented the Lifetime Achievement Award to G. Vernon Byrd the Special Achievement Award to Mark J. Rauzon. (See separate articles on these individuals.) The award for Best Student Oral Presentation went to Stephani Zador, with Honorable Mentions for Rachel Sprague, Shiway Wang, and Heather Wilson. The award for Best Student Poster went to Laurel McFadden, with Honorable Mentions going to Motohiro Ito, Justine Sears, and Yasuko Suzuki. After the food and the awards, dance music was provided by local band "The Photonz."

A post-meeting boat trip to Resurrection Bay netted some life seabirds for numerous PSG members, including many Crested Auklets on the bay—a very rare event. Other PSG members and families enjoyed a tour of a local sled dog kennel and a dogsled rides behind Huskies that were veterans of the Iditarod Race.

This was the first PSG meeting to be held in Alaska, and it was a highly successful and memorable one. The Local Organizing Committee, which was ably led by Verena Gill, did an excellent job of fund-raising and provided financial support on the order of $13, 000 to help students and non-US/non-

Canada scientists to attend the meeting. The Silent Auction, which offered items from a Japanese carved owl to an historical novel published by a PSG member, also raised money. Enough funds were raised to provide three lunches provided to all registrants. In addition, the hotel and surroundings were stunning, providing an exceptional overall experience for attendees.

Financial support for the meeting was provided by: ABR Inc.—Environmental Research & Services; Alaska Pacific University; Audubon Alaska (the Alaska State Office of the National Audubon Society); the Census of Marine Life; ConocoPhillips; the Marine Conservation Alliance; the Migratory Bird Management Division, U.S. Fish and Wildlife Service (Region 7); NOAA; the North Pacific Longline Association; the North Pacific Research Board; the University of Alaska—Anchorage; and the U.S. Geological Survey. Three artists, René Reyes, Iain Stenhouse, and Angie Doroff, contributed artwork for the program. Twenty-two other organizations and individuals helped with in-kind support. PSG is grateful to all these benefactors.

PSG'S 2007 MEETING WILL BE AT ASILOMAR

The 34th Annual Meeting of the Pacific Seabird Group will be held on 7–11 February 2007 at the Asilomar conference center, Pacific Grove, California. Asilomar is a state conference facility in a wooded, rural setting on the edge of the Pacific Ocean. It is close to Monterey, Carmel, Point Lobos, and other interesting sites.

For many years, PSG held its annual meeting at Asilomar every other year. Our last meeting there was in 1988; soon thereafter our meetings became too large for Asilomar's facilities. We are looking forward to returning to the expanded center.

TAIWAN SEABIRD MEETING ON HOLD

PSG has begun planning for a special PSG meeting Taiwan. We hope that such a meeting will improve communication with seabird scientists in eastern Asia and increase PSG's presence there. The Taiwanese government has proposed to support the costs for the meeting and provide organization of all local arrangements. Ron Ydenberg has been acting as PSG's liaison with the Local Organizing Committee (The Wild Bird Federation of Taiwan), and Tony Gaston has taken the lead in organizing the Scientific Program.

PSG's Executive Council decided in February 2006 meeting to proceed with the Taiwan meeting. It had been hoped to arrange the meeting for November 2006. (PSG will also hold its regular Annual Meeting as planned—see preceding article.)

Unfortunately, preliminary arrangements for the Taiwan meeting have been delayed due to circumstances beyond the PSG organizers' control. Therefore it has not been possible to make progress on meeting plans during spring 2006, as had been hoped. In May the PSG organizers regretfully decided that the Taiwan meeting would have to be postponed until 2007 or 2008. We will keep the membership informed about future developments.

REPORT OF THE PSG CHAIR
TO THE EXECUTIVE COUNCIL, 15 FEBRUARY 2006

Robert H. Day

Since the previous Chair's Report to the PSG Executive Council, PSG held a very successful 32nd Annual Meeting in Portland, Oregon, in January 2005. That meeting was held in conjunction with the 27th Annual Meeting of the Waterbird Society, the fourth time the two societies have met jointly. The 2005 meeting was highly successful because of a hard-working Local Organizing Committee, led by Chair Katie O'Reilly. The meeting attracted a total of 391 paid registrants from at least 23 countries. Highlights included Plenary Lectures by Spencer G. Sealy (who also received PSG's Lifetime Achievement Award), Susan Haig, and the team of Mark Rauzon and Bradford Keitt. There were Symposia on "The biology and conservation of the Xantus's Murrelet" (convened by Harry Carter and Esther Burkett) and "Island restoration and enhancement: successes, failures, and tools for the 21st Century" (convened by Mark Rauzon and Bradford Keitt), and Special Paper Sessions on "Advances in seabird and waterbird ecology from stable-isotope studies" (convened by Keith Hobson), "Beached-bird surveys: lessons to learn—past, present, and future" (convened by Rebecca Harris, Scott Newman, and Flo Tseng), and "Status and trends of Marbled Murrelets rangewide" (convened by Kim Nelson). The Portland meeting realized a profit for PSG of $7220. Of those profits, $1000 total was used to assist two Latin American seabird biologists, Giannina Cadena of Colombia and Yuri Albores of México, to attend the Portland meeting. The remainder of the profits was deposited in the PSG General Fund.

The 33rd PSG Annual Meeting is being held in Girdwood, AK, during 15–18 February 2006, at the Alyeska Prince Hotel. The 2006 meeting has attracted about 260 paid registrants. It has benefited greatly from the leadership of Verena Gill, Chair of the Local Organizing Committee, and other members of the Committee. I especially thank all members of the committee for their extensive efforts at raising donations to support this meeting, which total $21,773 plus some in-kind donations. Of this money, a grant from the North Pacific Research Board to John Piatt for a Symposium on "Seabirds as Indicators" provided $8448 for general meeting costs and attendance by students. The major task of organizing our high-quality program has been accomplished by Scientific Program Chair Katie O'Reilly. The program includes three plenary lectures, two symposia, three special paper sessions, about 130 oral presentations, and 60 poster presentations. (Also see "Meeting News," page 25.)

Student travel awards for the 2006 meeting were decided by the PSG Awards Committee, led by Past Chair Daniel Roby, and totaled US$6257 to students from the US and Canada. Travel awards to non-US/non-Canadian meeting attendees included US$7000 for nine applicants, of which $2,800 went to students from non-US/non-Canadian countries. Other activities by the Past Chair included the selection of Vernon Byrd to receive the PSG Lifetime Achievement Award and Mark Rauzon to receive the Special Achievement Award. He also worked with the Local Organizing Committee for PSG's next Annual Meeting, which will be on 7–11 February 2007 in Pacific Grove, California.

A novel activity for PSG is planning for a special PSG meeting to be held in Lugang, Taiwan, on 21–24 November 2006. Ron Ydenberg has been acting as PSG's liaison with that Local Organizing Committee (The Wild Bird Federation of Taiwan), and Tony Gaston has taken the lead in organizing the Scientific Program. We hope to use this meeting to improve communication with seabird scientists in eastern Asia and to increase PSG's presence there. The Taiwanese government is supporting the costs for the meeting and providing organization of all local arrangements. We also hope to attain its support in publishing a Symposium. The Executive Council of PSG will decide officially at the 2006 meeting in Girdwood whether to proceed with this meeting, although we have had initiate tasks such as official contacts with the Taiwanese government, in the event that we actually do hold the meeting there. [***Editor's note*:** The Executive Council approved the Taiwan meeting in February 2006. However, due to serious delays in preliminary arrangements, the PSG liaison decided in May 2006 that the meeting will have to be postponed.]

The PSG Conservation Committee and Vice-Chair for Conservation Craig Harrison have been involved in several important issues this year. PSG has been involved in several high-profile conservation issues affecting seabirds in the Pacific, including opposition to a major new Liquid Natural Gas plant slated for construction by ChevronTexaco in the Islas Los Coronados, Baja California Nord, México; opposition to an effort by Congressman Pombo (R-CA) to allow public access to all parts of National Wildlife Refuges (especially the Farallones National Wildlife Refuge), regardless of the effects on wildlife; a Conservation Policy Statement for the Gulf of California and Baja California; support for the creation of a series of Biosphere Refuges in the

Gulf of California; comments on the Draft Restoration Plan for the Montrose settlement; and comments on the Draft Conservation Plan for seabird refuges in the state off Washington. I sincerely thank Craig for staying current on so many issues, rapidly producing carefully crafted letters from PSG as each issue arose, and providing excellent and thoughtful advice on many issues that PSG faced in 2005–2006.

PSG's Editor of *Pacific Seabirds*, Vivian Mendenhall, published three issues of the journal in the past year (Vol. 31, No. 2; Vol. 32, Nos. 1 and 2). PSG again relied on its website, instead of *Pacific Seabirds*, to disseminate abstracts of papers presented at its annual meeting, saving $2,138 over the costs of producing previous volumes. I thank Vivian for making *Pacific Seabirds* professionally edited and keeping its publication on schedule.

Marine Ornithology, under Chief Editor Tony Gaston, continues as an international web-based, peer-reviewed scientific journal, while maintaining over 140 institutional and individual subscriptions in 16 countries. Scott Hatch recently took over as Editor for North America and North Pacific Region, allowing Tony to focus on being the Managing Editor; Rob Barrett and John Cooper continue their roles as Editors for Europe and Asia/Southern Hemisphere, respectively. Thanks to Tony's efforts, this journal has remained in the black without charging PSG all of the approved amount of $6,000 per year for support.

The Publications Committee, led by Coordinator Pat Jodice, has been working on posting down-loadable PDFs of back issues of *Pacific Seabird Group Bulletin*/*Pacific Seabirds*, Technical Reports, and other PSG-sponsored publications that are otherwise difficult to obtain. In particular, I thank George Divoky, The Friends of Cooper Island, and Craig Harrison, who worked on scanning the older issues of *Pacific Seabird Group Bulletin* so that as many issues as possible could be made available on the PSG Website. PSG's Publications Committee also used earnings from the Endowment Fund to publish one Symposium ("The Biology and Conservation of the American White Pelican") as a Special Issue of *Waterbirds* (Vol. 28, Special Publication 1), and a second Symposium ("Beached-bird surveys: lessons to learn") will be published soon in *Marine Ornithology*.

The PSG Website has continued to benefit from the excellent management of webmaster Lisa Ballance, with technical assistance from Robert Holland, Anna Klimaszewski, and Ben Saenz; in particular, I thank them for developing a new, better website interface. The website continues to expand and provide detailed and timely information to members on PSG's activities, news, and annual meetings. This service is becoming increasingly critical to our organization, and we all owe a debt of gratitude to Lisa, Robert, Anna, and Ben for their continuing willingness to manage PSG's website and to work on improving it.

PSG has been fortunate again this year to have Student Representative Shiway Wang on EXCO. Shiway has led the effort to create a new Student Directory for PSG, collect information on student activities for an annual report in *Pacific Seabirds* on milestones for student members, organized a student luncheon meeting and room shares for the Annual Meeting, and served as Chair for the Silent Auction at the Annual Meeting. Shiway has done much to show the students how much they can tribute to our organization by getting involved. As an indication of the vibrancy of our organization, ~60 students are presenting oral presentations or posters that are eligible for Student Paper Awards.

PSG is in very solid financial shape, thanks to the efforts of Treasurer Ron LeValley and the three Trustees of the PSG Endowment Fund (Malcolm Coulter, Craig Harrison, and Ron LeValley). The General Fund of PSG realized a net decline of over $12,117 during its 2004–2005 Fiscal Year (1 October–30 September) due to some special expenditures (e.g. deposit on 2007 meeting and aiding in the publication of White Pelican Symposium) but remains at a very healthy level of over $42,000. The Endowment Fund increased in value by approximately18% during the 2004–2005 Fiscal Year and was valued at $134,528 as of 8 January 2006. The Trustees have used conservative and prudent methods to protect the principal of the Endowment Fund by inflation-proofing it, then using excess profits to support costs of PSG publications (up to $7,500 from FY2004–2005). At the end of the fiscal year, PSG's net worth was $170,983, which is an increase of 8% over the previous year.

Several of PSG's committees have had a busy year. The Seabird Monitoring Committee, under the leadership of coordinator Scott Hatch, has worked on implementing the Pacific Seabird Monitoring Database, which is under PSG's sponsorship; a beta version of the data-entry program will be demonstrated in Girdwood. Bradford Keitt and Shaye Wolf were appointed as Co-Coordinators for the Xantus's Murrelet Technical Committee, replacing Gerry McChesney. Danielle Prenzlow Escene was appointed as Coordinator of the Marbled Murrelet Technical Committee, replacing Anne Harfenist; this year, Danielle has been heavily involved in preparing a PSG response to the USFWS effort to delist the California, Oregon, and Washington population of Marbled Murrelets. PSG continues to support and encourage the creation of a México Seabird Conservation Committee; Xico Vega and Eduardo Palacios are currently considering serving as Co-Coordinators of this new PSG committee. PSG also added a new committee, the Loon/Grebe Technical Committee, with Daniel Anderson as the Acting Coordinator until a new one can be selected.

On the whole, PSG has had a successful and productive year. We are extremely fortunate to have a core of highly committed, dedicated, and hard-working members. Our rising membership during a period when many professional scientific societies have declining membership reflects well on the strength of our organization. This membership is the resource that will sustain our group and help it meet the challenges ahead and will allow it to continue to make major contributions to the study and conservation of Pacific seabirds. Thanks to all of you for your involvement in, and help on behalf of, PSG.

COMMITTEE REPORTS

PSG's committees do the group's conservation and technical work. They report to the Executive Council on the year's work at each Annual Meeting. A full list of committees is at the end of this issue of *Pacific Seabirds*.

JAPAN SEABIRD CONSERVATION COMMITTEE

Koji Ono and John Fries, Co-coordinators

The Glaucous Gull (*Larus hyperborea*) is one of the common winter seabirds on Hokkaido (northern island of Japan). In 2005, Declan Troy (Alaska, USA) reported by e-mail that Glaucous Gulls were marked with satellite transmitters in 2004 at Barrow, Alaska. The data showed that one of his birds traveled to northern Hokkaido in the vicinity of Wakkanai. Troy gave us information on the location of the bird, and Japanese birdwatchers finally found the gull. Because some seabirds can move very widely in the non-breeding season, cross-border coordination is very important for telemetry, color-marking, or banding projects. Sometimes, these seabirds suffer serious impacts at sea in their wintering areas.

In the 1997 Nakhodka oil spill, Japan learned much about gathering beached-bird data during oil spills in order to estimate total mortality and rehabilitation, with assistance from Harry Carter (British Columbia, Canada), Roger Helm (Oregon, USA), and Scott Newman (New York, USA). In June 2005, an international workshop served to exchange views on the possibility of Natural Resource Damage Assessment (NRDA) in Japan, as discussed earlier during the Nakhodka oil spill. Glenn Ford (Oregon, USA) gave a presentation on the need for: (a) annual beached bird surveys to assess background levels of natural mortality, chronic oiling, and major oil spills; and (b) at-sea surveys to assess seabird distribution and abundance at sea. This information is important for NRDA to obtain funds for seabird restoration, as done in the USA under the 1990 Oil Pollution Act. In Japan, there are few beached bird programs and little data on at-sea distribution and abundance. However, we are working to compile available at-sea survey data, as done was for the North Pacific Pelagic Seabird Database (NPPSD).

The Common Murre Restoration Project on Teuri Island is ongoing. Common Murres (*Uria aalge*) were historically common around Hokkaido, but the population has declined dramatically in recent years. Teuri Island is currently the only colony in Japan. In 1938 there were 40,000 birds on Teuri; however, only 15 birds were observed in 2005 and no chicks fledged. Three presentations in Japan in 1997-2002 by Steve Kress (New York, USA), Harry Carter, and Paul Kelly (California, USA) discussed successful restoration of Common Murres at Devil's Slide Rock, California, using social attraction. In 2003, we decided to use social attraction to attempt to keep murres breeding in Japan. We deployed 240 decoys, one mirror box, and one sound system (taped murre calls provided by Gerry McChesney— California, USA). The attractants were installed at the start of the 2005 breeding season atop Byobu-Iwa Rock, a historical breeding site. Slaty-backed Gulls (*Larus schistisagus*), which prey on Common Murres, were breeding around the decoys. We attempted to reduce suitable gull breeding habitat through deploying decoys and iron stakes. The number of gulls was reduced by 30% (19 breeding pairs in 2005, 27 breeding pairs in 2004, 40 breeding pairs in 2003). No murres laid eggs in 2005, but murres were attracted to the rock at least 16 times! Efforts will continue in 2006.

Continued communication and collaboration between Japanese seabird biologists and other members of the Pacific Seabird Group are important for further development of seabird research and conservation in Japan and the North Pacific.

STUDENT REPRESENTATIVE

Shiway Wang

Activities during the year

The Student Directory was updated once during the year—I removed those that have graduated and added those who matriculated. The new student representative will have to update it again soon.

Periodic e-mails were sent out to students, to remind them about the annual meeting, abstract deadlines, travel award deadlines, presentation guidelines, judging forms, and other information of importance to student members.

Activities in support of the Annual Meeting

A Social Hour for Students and Junior Biologists was organized for Wednesday evening at the 2006 Annual Meeting.

In order to facilitate interaction and mentoring between senior biologists and students/junior biologists, a luncheon was tentatively scheduled for the Annual Meeting. Far more people (103) were interested in participating in this event than expected, including 36 senior biologists. Therefore the

Local Organizing Committee decided to switch to a mentoring session on one or two evenings, with tables set up at which junior biologists and students were able to talk with senior biologists in various specialties.

Another duty of the Student Representative is to be Chair of the Silent Auction at each Annual Meeting. I solicited donations and volunteers for this event (with lots of help from the Local Committee).

PUBLICATION COMMITTEE

Patrick Jodice, Coordinator

Posting PDFs of PSG publications on the Web site

Last year I proposed to the Executive Council that five past symposia and one technical report be converted to PDFs and made available free on the PSG web site. requesting funds from the Endowment Four past symposia that were published in *Studies of Avian Biology* are already available free on the web, through SORA (Searchable Ornithological Research Archive). Although it took some to set up, the scanning is very near complete and I expect to have all PDFs within the next month. I will check them for quality, "bookmark" each file, and then send them to the web master for posting.

The publications being scanned are:

- Marine Birds: Their Feeding Ecology and Commercial Fisheries Relationships
- Status, Ecology, and Conservation of Marine Birds of the North Pacific
- Behaviour and Ecology of Sea Ducks
- Biology of Marbled Murrelets: Inland and At Sea
- Status and Conservation of the Marbled Murrelet in North America
- Exxon Valdez Oil Spill Seabird Restoration Workshop (PSG Tech. Rep. no. 1)

Most of these files will be quite large, so my intent is to split each volume up into its component papers and then arrange them as in the original publications.

The project is being supported from the Endowment Fund, as approved last year by the Executive Council. While I have not received the final bill, I expect it will be very close to the allotted amount.

Marine Ornithology on SORA

I am attempting to get SORA (Searchable Ornithological Research Archive; http://elibrary.unm.edu/sora/) to make *Marine Ornithology* (MO) available via their web page. SORA already provides free access to *Auk*, *Condor*, *Studies in Avian Biology*, *Journal of Field Ornithology*, and *Wilson Bulletin*. I have recently made contact with SORA (after lengthy attempts). SORA would welcome MO, and the fact that we already have PDFs of it makes everything easier. We still need to make the journal searchable, however, and that would require re-keying the metadata (title, author, pages, volume, etc). and putting it into sgml format. I will be getting in touch with the webmaster so we can determine how best to do this. These efforts will improve the accessibility of our journal. I also need to determine what the process will be for adding issues of MO as they become available. We may want to determine if there is a way to obtain the sgml formatted metadata on the front end for future processing.

Guidelines for proposing Symposia for Annual Meetings

We have developed a set of guidelines for proposing Symposia and Special Paper Sessions at annual meetings. These guidelines were used somewhat informally this year as a test run. They were found to be helpful, and the guidelines will soon be posted permanently on the PSG web page at www.pacificseabirdgroup.org. This will allow both organizers and those proposing sessions to coordinate the transfer of necessary information in a timely manner.

We also have developed a set of guidelines for requesting funds from PSG for the purpose of publishing symposia or other materials. Last year, for example, we provided funds for publication of the White Pelican Symposium in *Waterbirds*.

Both sets of guidelines are printed in this issue of *Pacific Seabirds* following the Committee Reports.

PSG EDITOR'S REPORT FOR FISCAL YEAR 2005

Vivian Mendenhall, Editor, *Pacific Seabirds*

Three issues of *Pacific Seabirds* were published between 1 October 2004 and 30 September 2005: Volume 31, numbers 1 and 2 (Spring and Fall 2004), and Volume 32, number 1 (Spring 2005). Costs of printing and mailing for these three issues were: 31(1), $1,942.85; 31(2), $2,321.10; and 32(1), $2,819.71. Table 1 gives details for press runs and costs.

The unit cost for printing one copy of the journal was higher for *Pacific Seabirds* 32(1) than previously. There were two reasons for this. The basic cost seems to have risen substantially in 7 months (I don't know why yet). Secondly, 32(1) was printed in 2 batches—the initial press run of 500 left very few for future needs, so I had another 50 printed. The second press run was more expensive ($5.52 per unit) than the first run ($4.03 per unit). This was true even though the price of the first press run included a one-time charge of a few hundred dollars for setup of the print job.

The price per issue of *Pacific Seabirds* is lower now than it was

TABLE 1: Summary of *Pacific Seabirds* printings, Fiscal Year 2005

Issue	Date published	Pages	No. copies	Printing cost	Printing cost/copy	Mailed		
						To U.S.	Foreign	Mailing cost
31(1)	Oct 2004	40	625	$1,555.93	$2.49	370	74	$386.92
31(2)	Feb 2005	40	625	$1,834.23	$2.93	370	74	$486.87
32(1)	Sep 2005	44	550	$2,291.63	$4.17	356	114	$538.08

through Volume 30. This was because, starting with Volume 31, we stopped publishing the meeting abstracts in the journal (they are now on our Web site instead). Printing and mailing of volume 31 cost $4,263.95, compared with $6,401.49 for volume 30.

A few comments on *Pacific Seabirds*: The journal continues to play its primary role of keeping members current on research activities and conservation issues. The core of the journal is Craig Harrison's Conservation Report and the yearly Regional Reports. Craig and the regional representatives deserve major thanks for their work on these sections! Full reports of ongoing research work appear in most issues (these are not peer-reviewed, as an introductory line makes clear). I also write occasional summaries of news or literature that are of immediate special interest ("Seabird News"). And the Spring 2006 issue will have a number of reports from PSG's committees—I hope we can continue doing that every year!

Finally, I sometimes receive a short article for peer review. Although many peer-reviewed articles naturally are sent to *Marine Ornithology*, *Pacific Seabirds* remains an outlet for small research projects whose primary audience is in the Pacific region.

Thanks again to all who contributed during the past year!

PACIFIC SEABIRD LOON/ GREBE TECHNICAL COMMITTEE

Daniel W. Anderson, Coordinator

Given the recent known and unknown population status of many of North America's loon (Gaviidae) and grebe (Podicipedidae) populations, the Pacific Seabird Group established this committee to organize expertise and to study specific conservation problems as they might come up. Initially, there was a strong interest in the status of *Aechmophorus* grebes (Western and Clark's Grebes) because recent data from multiple sources indicated that rather severe population declines had apparently occurred in some areas. Also, given the importance and frequency of *Aechmophorus* grebe oiling off the Pacific Coast, potential man-caused disturbances on both the breeding grounds and on the wintering grounds posed serious threats to these species. On further considering the problem, this concern was expanded to the various loon species (namely Common Loons and Pacific Loons, *Gavia immer* and *G. pacifica*) that essentially suffer many of the same or similar ecological problems as these grebe species. Although this committee is named after particularly vulnerable species among the two most important families of surface-dwelling seabirds affected by these similar ecological problems, it also addresses the problems in any number of loon and grebe species and in ecologically-similar waterbird species that face similar perturbations, such as the seaducks.

The Committee's goals are briefly summarized as follows:

(1) To solicit participation on this committee from active loon and grebe researchers and managers throughout North America;
(2) To seek-out, analyze, and discuss potential conservation issues involving any species of North American loons or grebes or other ecologically similar coastal species;
(3) To promote biological conservation of loons and grebes, as well as the ecological health of their habitats (in breeding, migration, and wintering contexts);
(4) To promote range-wide population-status and historical-comparison determinations and evaluations;
(5) To encourage long-term monitoring projects of loon and grebe species;
(6) To encourage ecological and behavioral studies on these groups of both basic and applied nature;
(7) To support, where possible and after discussion, any of the goals set forth for loons and grebes in the various regional plans under the North American Waterbird Management Plan of the U.S. Department of the Interior;
(8) To draft letters and documents with overall committee recom-

mendations for approval by PSG membership of policy statements, statements and letters of support/ suggestions to management and research entities (policy statements to be published in appropriate issues of *Pacific Seabirds* as a matter of public record). To inform PSG membership of issues, studies/findings, and other activities regarding grebes and loons.

(9) Assist management agencies with expertise and preparation of items listed in (7) above when requested.

Committee membership as of 15 December 2005 includes the following persons: Joseph Allen, Daniel Anderson, Sean Boyd, Harry Carter, Daniel Esler, Joseph Evenson, Steve Hampton, Craig Harrison, Laird Henkel, Gary Ivey, James Lovvorn, Tamara Mills, Gary Nuechterlein, David Nysewander, Katherine O'Reilly, and Joel Schmutz. Suggestions for additional members should be directed to the current Coordinator (see the most recent issue of *Pacific Seabirds).*

REPORT FROM MÉXICO SEABIRD CONSERVATION COMMITTEE

Xico Vega Picos

PSG, in coordination with the Waterbird Conservation Council, continues to support and encourage the creation of a México Seabird Conservation Committee. Xico Vega and Eduardo Palacios currently are considering serving as Co-coordinators of this new PSG committee.

A Conservation Plan has been proposed for Northwestern México and should be completed by 2007. Several television programs about waterbirds have been developed for public outreach.

IUCN REPORT TO PSG EXECUTIVE COUNCIL

Craig S. Harrison, Vice-Chair for Conservation

PSG has been a member of the World Conservation Union since the mid-1990s. (The organization formerly was known as the International Union for the Conservation of Nature and Natural Resources, and the acronym IUCN is still used.) The IUCN has been in existence since 1948 and currently consists of 82 nations, 111 government agencies, and 800 non-governmental organizations. It addresses a wide variety on international and regional conservation problems, including marine conservation issues such as longline fisheries.

The 3rd IUCN World Conservation Congress met in Bangkok in August 2005. PSG has never had a representative attend an IUCN international meeting.

I am PSG's contact person for mailings from the IUCN. Additional information concerning the IUCN can be found at http://www.iucn.org

PSG Executive Council for 2005. Top row: Mark Tasker, Dan Roby, Beth Flint, Melanie Steincamp, Adrian Gall, Shiway Wang, Craig Harrison, Dan Robinette. Bottom row: Pat Baird (longtime Elections Chair), Bob Day, Katie O'Reilly, Ron Ydenberg, Vivian Mendenhall, Ron LeValley, Verena Gill. Not pictured: Esther Burkett.

GUIDELINES FOR PROPOSING A SYMPOSIUM OR SPECIAL PAPER SESSION

These guidelines have been developed by the Publications Committee for the benefit of those who are interested in convening special sessions at Annual Meetings. Also see the committee's report in the previous section. The guidelines will be posted on PSG's Web site, www.pacificseabirdgroup.org

GUIDELINES FOR PROPOSING SYMPOSIA OR SPECIAL PAPER SESSIONS AT PSG MEETINGS

Differentiation of Symposia and Special Paper Sessions

A Symposium is a coherent set of papers that (a) is designed to be published as a coherent set of papers in a PSG-sponsored publication; (b) has ≥50% of the publication costs raised in advance by the Convenors of the Symposium; (c) has been cleared in advance with the Chairs of the Scientific Program and the Publications Committee that it is, indeed, going to be called a Symposium and is going to be supported financially (or otherwise) by PSG. Additionally, the Editor of *Marine Ornithology* should be consulted in advance to determine whether, in concept, the topic of the Symposium and the draft paper titles are appropriate subject matter for that journal or whether they should be published elsewhere. Our view is that these are marquee paper sessions that will be highlighted during a given year's meeting and that they will be a substantial coherent set of papers that will be published under PSG aegis, preferably, although not exclusively, in *Marine Ornithology*.

We suggest that the number of Symposia at a given meeting be limited (perhaps no more than two), which should increase PSG's financial ability to support the publication of these sessions. In the past, published Symposia have appeared in *Marine Ornithology*, *Studies in Avian Biology*, *Northwestern Naturalist*, *Western Foundation of Vertebrate Zoology*, *Canadian Wildlife Service Special Publications*, and stand-alone products (e.g., book format).

A Special Paper Session (SPS) is a coherent set of papers that (a) is not necessarily designed to be published (whether in a PSG-sponsored publication or something else) as a coherent set of papers; (b) has little (<50% of costs) or no money raised for publication, even if there is an attempt to publish something; and (c) has not been cleared with the Chairs of the Scientific Program and the Publications Committee that it is going to be called a Symposium and is going to be supported financially (or otherwise) by PSG. The SPS should still be cleared for inclusion in the meeting, however, by the Chair of the Scientific Program. Our view is that these are important groups of papers that either are not going to be published together or for which little or no money has been raised for publishing them together.

Guidelines to be used for Reviewing Symposia and SPS

All proposals will be peer-reviewed and ranked by a committee consisting of the Program Chair, the Editor of Marine Ornithology, and the Chair of the Publication Committee. Peer-reviewers may be solicited by this committee, if necessary. Symposium proposals must be submitted by 15 May each year to the Program Chair. Following submission, the Program Chair will maintain correspondence will those who submitted proposals until a final decision is reached.

Criteria for evaluating proposals will include the following:

- The Symposium or SPS is based on sound science and contributes to important ecological understanding or has good potential to advance the field of seabird ecology/biology/conservation/management in a significant way.
- The Symposium or SPS is timely; it identifies and focuses on issues that are highly pertinent to current conservation, management, or biological issues related to seabird ecology/biology/conservation/management.
- The Symposium or SPS should showcase innovative or original work, or should provide a significant synthesis within a topic or discipline.
- The Symposium or SPS represents a collaboration, particularly with respect to bringing together scientists from diverse academic backgrounds or from a diversity of settings (e.g., academic, public agencies, NGOs).
- A Symposium should be well organized and balanced with synthetic overviews or broad topical coverage and should not just include a set of similar case studies. In contrast, a SPS may include a series of pertinent case studies as long as there is at least one synthetic or overview presentation.
- The Symposium or SPS is consistent with the meeting theme and/or will assist attendees in obtaining a deeper appreciation of the meeting theme and/or will increase atten-

dance by broadening the potential base of attendees.
- For Symposia, a majority of the confirmed and prospective participants have established reputations in their respective fields. A Symposium may include, but should not be primarily composed of, student papers. In contrast, a SPS may include predominantly student papers and can be viewed as a means to increase student participation and highlight student research.
- For Symposia, the presenters are experienced or particularly engaging speakers.
- A Symposium must include balanced and broad perspectives on the topic if applicable, and must not be overtly biased by the perspectives of the organizer(s) and invited speakers.
- In the interest of broadening participation, an individual is allowed to be an organizer (either a principal organizer or a co-organizer) for only one Symposium or SPS per year.

After Symposia and SPSs are accepted and the scheduling for the meeting is underway, it becomes increasingly difficult to accommodate cancellations and schedule changes. Hence, as a courtesy to the meeting organizers and in fairness to other submitted proposals, Symposium organizers are urged to obtain firm commitments from as many of their invited speakers as possible before submitting their proposal, rather than listing only "possible" speakers or only tentative commitments.

If a proposal is accepted, the organizers will be required to submit a final summary description of the Symposium in the correct format by a date decided upon by the Program Chair. This summary will appear in the preliminary program and should be written so as to stimulate interest and promote attendance. This description should be submitted on the electronic form. The correct format also requires a complete and up-to-date listing of organizers names and their institutions, addresses, telephone, fax and email addresses correctly referenced. The title of the Symposium should be followed by the descriptive text.

This posting should also include a list of confirmed speakers and each speaker's name, institutional affiliation, mailing address, telephone number, fax number and e-mail address as well as a list of times for each presentation.

Format for Submitting a Proposal for a Symposium or SPS

The following guidelines are intended for use when preparing proposals for Symposia and SPS. These guidelines are based on those used to decide on funding of publication of Symposia. The following sections must be addressed; additional information or narratives may be provided, if relevant. Requests should not exceed 4 pages single-spaced. NOTE: A separate proposal is required for requesting funds for publication. Much of the required information is identical, but additional information regarding funding is required. Please see the PSG web site for Guidelines on Requesting Funds for Publishing Symposia or Special Papers Sessions. All proposals are due by 15 May.

Title: List the title of the session.

Type of session: Symposium, Special Paper Session, plenary, other.

Date: Is this session scheduled to occur at the current year's meeting or a future meeting?

Session coordinator and affiliation: provide all relevant contact information. Is the coordinator a member of PSG? Has this person convened a similar session in the past? If so, please provide details (where, when, topic). Was this session published? Is the coordinator or another participant willing to serve in an Associate Editor role if requested to do so by the editor of the journal?

List of participants: Please list all participants (authors and co-authors), note if they have been invited or selected from submitted abstracts, and note if invitees have committed, are tentative, or are suggested. Include session coordinator if also presenting. Are the participants members of PSG?

Title of papers: List all known titles. If titles are not available for some participants, list subject matter of presentation.

Significance of the session and papers within it: How might this session best be described? For example, is it a methodology session (e.g., monitoring seabirds with radar), does it focus on a specific type of event (e.g., oil spills and seabirds), is it taxon-specific, or is it a revisit of a prior Symposium topic? How would this publication benefit the management or conservation of Pacific seabirds? This section should be prepared as a narrative and is similar to the 'justification' section required in most scientific proposals.

Publication Plan: Is the session targeted-for publication? If so, what journal is being targeted? Have you already contacted the journal or received an agreement to publish from the journal? Why was this journal chosen? Are all participants aware that this is the targeted journal? Has the journal set a page limit and, if so, what is it? Is there an anticipated publication date? Will the Symposia be published as part of a regular issue or as a separate issue? How will PSG's contribution be recognized in the journal (e.g., an introductory overview where PSGs contribution can be explicitly acknowledged)?

Outside (i.e., not from PSG) funding sources for publication: If targeted for publication, have you sought

matching funds? If so, how much is guaranteed? From whom have funds been sought? Have you sought complete funding from an outside source?

Funds requested from PSG for Publication: If intended for publication, will you seek funds from PSG? If so, how much?

Please provide any additional information that may assist in the funding decision.

GUIDELINES FOR REQUESTING FUNDS FROM THE PACIFIC SEABIRD GROUP FOR PUBLICATION OF SYMPOSIA OR SPECIAL PAPER SESSIONS

The following guidelines are intended for use when preparing requests for funds to PSG for the publication of Symposia and Special Paper Sessions. Currently, all requests will be considered during the Executive Council session at the annual meeting and voted upon at that time. To facilitate this process, all requests for funds must be submitted to the Chair of the Publication Committee no later than 60 days prior to the date of the upcoming Executive Council meeting. Requests for funds should be prepared in proposal format. The following sections must be addressed; additional information or narratives may be provided if relevant. Requests should not exceed 4 pages single-spaced.

Title: List the title of the session.

Type of session: Symposium, Special Paper Session, plenary, other.

Date: Is this session scheduled to occur at the current year's meeting, or did it occur at a past meeting?

Session coordinator and affiliation: provide all relevant contact information. Is the coordinator a member of PSG? Has this person convened a similar session in the past? If so, please provide details (where, when, topic). Was this session published? Is the coordinator or another participant willing to serve in an Associate Editor role if requested to do so by the editor of the journal?

List of participants: Please list all participants (authors and co-authors), note if they have been invited or selected from submitted abstracts, and note if invitees have committed, are tentative, or are suggested. Include session coordinator if also presenting. Are the participants members of PSG?

Title of papers: List all known titles. If titles are not available for some participants, list subject matter of presentation.

Significance of the session and papers within it: How might this session best be described? For example, is it a methodology session (e.g., monitoring seabirds with radar), does it focus on a specific type of event (e.g., oil spills and seabirds), is it taxon-specific, or is it a revisit of a prior Symposium topic? How would this publication benefit the management or conservation of Pacific seabirds? This section should be prepared as a narrative and is similar to the 'justification' section required in most scientific proposals.

Target journal: What journal is being targeted? Have you already contacted the journal or received an agreement to publish from the journal? Why was this journal chosen? Are all participants aware that this is the targeted journal? Has the journal set a page limit and, if so, what is it? Is there an anticipated publication date? Will the Symposium be published as part of a regular issue or as a separate issue? How will PSG's contribution be recognized in the journal (e.g. an introductory overview where PSG's contribution can be explicitly acknowledged)?

Outside (i.e., not from PSG) funding sources: Have you sought matching funds? If so, how much is guaranteed? From whom have funds been sought? Have you sought complete funding from an outside source?

Funds requested from PSG: Please break out by any categories (e.g., page charges, cost for printing of additional copies). Will these funds allow us to secure electronic copies at the same time for distribution on our web page?

Please provide any additional information that may assist in the funding decision.

TREASURER'S REPORT
FOR FISCAL YEAR 2005

PSG's Fiscal Year 2005 ran from 1 October 2004 to 30 September 2005.

Membership

As of November 30, 2005 PSG has:	Life Members	70
	Regular and Family	349
	Student	63
	Family	18
	Corresponding	3
	Total	429

This number has increased by 33 since last year, in part due to new members who joined at the Portland Meeting.

Financial Accounts

PSG maintains a number of bank accounts. The operating funds are kept in a regular checking account.

Regular Checking	September 30, 2004	$29,277.96
	September 30, 2005	$18,311.65

A Morgan Stanley money market account is kept as an interest –gathering account.

Morgan Stanley	September 30, 2004	$21,524.15
	September 30, 2005	$21,937.65

Our Endowment funds (Life Memberships and other specially designated monies) are kept in a mutual fund managed by Neuberger and Berman.

Endowment Funds	September 30, 2004	$102,923.74
	September 30, 2005	$128,294.99

Other Accounts:

Pacific Seabirds .

Vivian Mendenhall maintains an account to facilitate the printing and mailing of Pacific Seabirds

Balance as of	September 30, 2004:	$2,498.76
	September 30, 2005:	$1,477.22

Canadian Memberships

Ken Morgan maintains an account in Canada so that Canadian members can pay dues in Canadian dollars.

Balance as of	September 30, 2004:	$734.84
	September 30, 2005:	$62.53

United Kingdom Memberships

Mark Tasker maintains an account in the UK so that UK members can pay their dues in Pounds Sterling.

Balance as of	September 30, 2004	$770.32
	September 30, 2005	$899.23

Total Assets

Total Assets as of September 30, 2004	$157,729.77
Total Assets as of September 30, 2005	$170,983.27

TREASURER'S REPORT

		2004-05 Proposed	2004-05 Actual	2005-06 Proposed	Notes
Ordinary Income/Expense					
Income					
	Membership Dues	$9,500	**$7,127**	$9,000	**(1)**
	Books/Publications	$250	**$87**	$1,000	**(2)**
	Donations (restricted)		**$525**		**(3)**
	Donations		**$336**		
Total Income		$250	**$8,075**	$10,000	
Expense					
	2006 Meeting		**$500**		**(4)**
	2007 Meeting		**$4,800**		**(5)**
	Bank Service Charges	$25	**$5**	$25	
	Pacific Seabirds	$4,500		$4,500	
	Marine Ornithology	$6,000	**$4,300**	$6,000	**(6)**
	Dues and Subscriptions	$1,000	**$1,498**	$500	**(7)**
	Insurance	$1,700	**$1,849**	$1,850	
	Elections	$500		$250	
	Office Supplies	$50	**$25**	$50	
	Postage and Delivery	$300	**$219**	$300	
	Printing and Reproduction	$100	**$3,300**	$100	**(8)**
	Professional Fees	$850	**$400**	$850	**(9)**
	Telephone		**$319**	$600	**(10)**
	State Taxes	$20		$20	
	Chair's discretionary funds	$1,000		$1,000	
	Website Hosting	$215	**$107**	$110	
Total Expense		$16,260	**$17,322**	$16,155	
Net Ordinary Income		($16,010)	**($9,247)**	($6,155)	
Other Income/Expense					
Other Income	**Annual Meeting**	??	**$7,220**	$5,000	**(11)**
	Dividends	$300	**$414**	$400	**(12)**
	Endowment Fund Holding (LM)	*$2,500*	($1,635)		**(13)**
	Endowment Fund	*$6,387.22*			
	Publications Committee				**(14)**
Total Other Income Available		$5,000	**$5,998**	$5,400	
Net Income		**($11,010)**	**($3,248)**	**($755)**	

Notes:

1. Membership dues and membership went up this year and we have been aggressive about retaining members. Online registration and credit card use is now in place.
2. We should have some income from selling the White Pelican Symposium copies that we have. This would represent 50 copies sold at $15 apiece.
3. Restricted Donations are those designated for a specific cause, e.g. student travel awards.
4. Deposit on Girdwood Hotel
5. Deposit on Asilomar
6. Marine Ornithology has been coming in under the budgeted amount.

Notes to Treasurer's Report, cont.

7. We paid two years of our Ornithological Council ($500) dues in 2004-05.
8. We paid for the White Pelican Symposium from regular operating expenses.
9. This includes about $500 for bookkeeping and other support work (mailing copies of PS, books that are ordered) that I get from our bookkeeper.
10. This is for the mid-season and other conference calls.
11. An important part of our annual income now comes from the meeting.
12. Dividends are from the Morgan Stanley account and are considered part of the general operating income, interest and any increases in the Neuberger Berman Account stay in the Endowment Fund.
13. A bookkeeping account that I keep so that we are not transferring small amounts in and out of our Endowment Fund. At the end of the fiscal year, the endowment fund owed the general fund $1,635. This came about because there were $565 of income from Life Memberships and other donations to the Endowment fund and we spent $2,200 to publish the Beached Bird Symposium. There is a further obligation to pay $900 for scanning publications for the web that was also committed at our Portland Exco Meeting.
14. Publication Committee expenditures usually come out of the Endowment Fund Publication Grants. The Trustees for the Endowment Fund have authorized

FORUM

The Forum section gives PSG members a place to express their opinions on topics that concern the group. Viewpoints expressed here belong to the individual writers and do not represent PSG policy. This topic is also the subject of an item in the Conservation Report in this issue of *Pacific Seabirds*.

The Endangered Species Recovery Council has submitted formal petitions to remove the California Brown Pelican (*Pelecanus occidentalis californicus*) from the list of species covered by the federal Endangered Species Act and the California Endangered Species Act. In late May, FWS announced that the petition "presents substantial scientific or commercial information" and that delisting "may be warranted." FWS is required to make a final determination by December 2006, and has solicited information on this subspecies and other Brown Pelican subspecies to assist its decision. This action was taken to preserve the integrity of the Endangered Species Act, which should focus on species that are actually in danger of extinction. The restored population and the viability of this subspecies represents a success of the management efforts of state and federal wildlife managers and should be recognized as such. California Brown Pelicans have a population of around 200,000 birds, produce young in synchrony with environmental variables that track other species in the California Current, and have maintained an upward population trajectory for years. The Birds of North America Monograph on this species concluded in 2002 that the total population exceeds historical levels. There have been efforts to delist this species since 1980, and delisting has been advocated by prominent biologists such as Lloyd Kiff, Joseph Jehl, Jr., the late Ralph W. Schreiber, David G. Ainley and Dr. George L. Hunt, Jr. for decades. There are many seabirds that have severe conservation problems, and it undermines the efforts of conservationists with regard to truly endangered species to retain recovered species on endangered species lists.

—Craig S. Harrison

PSG NEWS

ELECTIONS FOR 2006 EXECUTIVE COUNCIL

As usual, we had low returns on the ballots—83 people voted. One region, Alaska, had more than one candidate on the ballot, and had the largest voter turnout (23, or 40%). Washington was next with 21 people voting (25%). For other regions the voter turnout was even lower. This is to be expected with only one candidate per region.

To get a greater return on votes, I would like to get more than one candidate running in each region. Also, if votes were cast via a web-based system, the return might also be greater—people just don't mail many letters nowadays. These two additions would certainly increase the voter response. We would need to check on the legality of a web-based vote.

Regardless of whether a web-based vote is possible, I urge each Regional Representatives to send me names of at least two willing candidates for his or her region by August 2006. Please be thinking now of others from your region who might like to be on the Executive Council. And all of the Executive Council needs to help with finding suitable candidates for next year (see below for positions that will be open).

Write-ins

I did have a number of write-ins for Vice-Chair for Conservation and for Northern California, and these people are now in my file of candidates for future PSG elections. If no one or only a single candidate is suggested for a region representative or an officer position, I will go to the " Futures File" and will ask each person in it to see if he or she is interested in the position. This often works out great. At other times, the " Futures" want to remain in the Futures File, promising that, at retirement (or when they get tenure, or when they finish x y or z) they will serve on the Executive Council.

Elected to the Executive Council for 2006

The election included special selection of a representative for Oregon and Washington, because the incumbent, Adrian Gall, had moved out of the area. Don Lyons will serve the remainder of the representative's two-year term.

Officers

- **Chair-Elect:** Verna Gill
- **Secretary:** Ron Ydenberg
- **Vice-Chair** for Conservation: Craig Harrison

Regional Representatives:

- **Northern California**: Esther Burkett
- **Old World:** Mark Tasker
- **Pacific Rim:** Linda Elliot
- **Special Oregon/Washington Representative for one year:** Don Lyons
- **Alaska/Russia**: Shiway Wang
- **Student Representative:** Jo Smith

There was a tie vote (actually a very close 3-way vote) for the Alaska/Russia Regional Representative. As required by the Bylaws, the Executive Council then voted on the two finalists. The final outcome was the election of Shiway Wang. This tie is the first in PSG history, at least since I have been Elections Chair.

Multiple voting

Once again, usual number of members voted for *every single* Regional Representative, even though the instructions *to vote only in one's own region* were very clear. I can usually straighten this out by looking at the return address's zip code, and if there is no return address, I look at the postmark. However, the latter are often so faded as to be unreadable. Ballots with votes for every regional representative, for which I cannot decipher the region from which it came, do not get counted except for the officer positions.

To avoid this problem in the future, if members' Regions were coded into the ballot (which could be done by adding another column to the Excel file), people might still vote for more than one regional rep., but I the correct region would be printed at the top of the ballot, and then I would count only the vote for that region's candidates.

To the new members of the Executive Council, 2006: Welcome, and may you enjoy your tenure on the Council!

Election for 2007 Executive Coun\cil

In fall 2006 we will send out ballots for Chair-Elect, Treasurer, and for Regional Representatives for Southern California, Canada, Non-Pacific U.S., and Oregon/Washington. Please be thinking of people to nominate—including yourself!

—Pat Baird

PSG 2020 LONG-RANGE PLANNING COMMITTEE ESTABLISHED

PSG has established a 2020 Strategic Planning Committee to engage in long-range planning for the group. The Executive Council approved this committee at its meeting in February 2006.

The mandate of the 2020 Committee is to review PSG's current operating structure and activities, and to determine how well they are matched to PSG's goals of studying and conserving Pacific seabirds and their environment.

The Committee will make recommendations to the Executive Council on how PSG can best continue meeting these goals over the next decade and a half. The committee's review will include:

- PSG membership, membership categories, and infrastructure
- Annual meetings
- Membership and structure of the Executive Council and other PSG committees
- PSG publications (including *Marine Ornithology*) and website
- Conservation issues and PSG's role
- Other issues as determined by committee members

The committee expects to consult with other PSG members early in the review process in order to obtain their input. The committee will determine whether an initial formal survey of the PSG membership will form part of its review.

Membership in the 2020 Committee will be broadly representative of PSG's general membership. Members will include regional representation, multiple nationalities, students, academics and managers, old and new members; members will be people with commitment to the success of PSG as an organization. The committee will initially consist of Lisa Ballance (Chair), Kim Nelson, Iain Stenhouse, Ron LeValley, Shiway Wang, Ken Morgan, and Jaime Jahnke. Additional members will be approved by the Executive Council. The Committee may seek outside expertise or input at any time from non-members of the committee.

The Committee will schedule its own meetings and tasks. It anticipates operating on a consensus basis wherever possible, and by majority vote only when necessary. It is answerable to the Executive Council, which will set final reporting deadlines.

To provide PSG members with an opportunity to comment on reports of the 2020 Committee, draft reports will be posted on the PSG website, and an advisory email to this effect will be circulated via the PSG list serve. All comments from members will be addressed prior to submission of the final report.

DEATH OF JIM KEITH

Dr. James O. Keith, longtime member of PSG and pioneer researcher on Brown Pelicans, contaminants, and many other subjects, died on 30 May 2006 at age 74. Jim worked for the U.S. Fish and Wildlife Servcie for 37 years, studying the effects of pesticides on birds in the US and Mexico. His work contributed to the banning of DDT use in the US. PSG offers its sympathy to Jim's colleagues and family. A more extensive obituary is planned for the Fall 2006 issue of *Pacific Seabirds*.

PUBLISHED PROCEEDINGS OF SYMPOSIA OF THE PACIFIC SEABIRD GROUP

The Pacific Seabird Group holds occasional symposia at its annual meetings. Published symposia are listed below. They are available for purchase (unless out of print). To order, see the membership application/publication order form. Out-of-print volumes are being made available on the PSG website, www.pacificseabirdgroup.org

SHOREBIRDS IN MARINE ENVIRONMENTS. Frank A. Pitelka (Editor). Proceedings of an International Symposium of the Pacific Seabird Group. Asilomar, California, January 1977. Published June 1979 in Studies in Avian Biology, Number 2. **Out of print.**

TROPICAL SEABIRD BIOLOGY. Ralph W. Schreiber (Editor). Proceedings of an International Symposium of the Pacific Seabird Group, Honolulu, Hawaii, December 1982. Published February 1984 in Studies in Avian Biology, Number 8. **Out of print.**

MARINE BIRDS: THEIR FEEDING ECOLOGY AND COMMERCIAL FISHERIES RELATIONSHIPS. David N. Nettleship, Gerald A. Sanger, and Paul F. Springer (Editors). Proceedings of an International Symposium of the Pacific Seabird Group, Seattle, Washington, January 1982. Published 1984 as Canadian Wildlife Service, Special Publication. **Out of print.**

THE USE OF NATURAL VS. MAN-MODIFIED WETLANDS BY SHOREBIRDS AND WATERBIRDS. R. Michael Erwin, Malcolm C. Coulter, and Howard L. Cogswell (Editors). Proceedings of an International Symposium at the first joint meeting of the Colonial Waterbird Society and the Pacific Seabird Group, San Francisco, California, December 1985. Colonial Waterbirds 9(2), 1986. **Order from:** Ornithological Societies of North America, PO Box 1897, Lawrence, Kansas 66044; phone (800) 627-0629; $12.00.

ECOLOGY AND BEHAVIOR OF GULLS. Judith L. Hand, William E. Southern, and Kees Vermeer (Editors). Proceedings of an International Symposium of the Colonial Waterbird Society and the Pacific Seabird Group, San Francisco, California, December 1985. Published June 1987 in Studies in Avian Biology, Number 10. **Order from** Allen Press, Lawrence, Kansas 66044; $18.50.

AUKS AT SEA. Spencer G. Sealy (Editor). Proceedings of an International Symposium of the Pacific Seabird Group, Pacific Grove, California, December 1987. Published December 1990 in Studies in Avian Biology, Number 14. **Order from** Allen Press, Lawrence, Kansas 66044; $16.00.

STATUS AND CONSERVATION OF THE MARBLED MURRELET IN NORTH AMERICA. Harry R. Carter, and Michael L. Morrison (Editors). Proceedings of a Symposium of the Pacific Seabird Group, Pacific Grove, California, December 1987. Published October 1992 in Proceedings of the Western Foundation of Vertebrate Zoology, Volume 5, Number 1. **Order from PSG treasurer;** $20.00.

THE STATUS, ECOLOGY, AND CONSERVATION OF MARINE BIRDS OF THE NORTH PACIFIC. Kees Vermeer, Kenneth T. Briggs, Ken H. Morgan, and Douglas Siegel-Causey (editors). Proceedings of a Symposium of the Pacific Seabird Group, Canadian Wildlife Service, and the British Columbia Ministry of Environment, Lands and Parks, Victoria, British Columbia, February 1990. Published 1993 as a Canadian Wildlife Service Special Publication, Catalog Number CW66-124-1993E. **Order from** Publications Division, Canadian Wildlife Service, Ottawa, Ontario, K1A OH3, Canada. ***Free of charge.***

BIOLOGY OF MARBLED MURRELETS—INLAND AND AT SEA. S. Kim Nelson and Spencer G. Sealy (Editors). Proceedings of a Symposium of the Pacific Seabird Group, Seattle, Washington, February 1993. Published 1995 in Northwestern Naturalist, Volume 76, Number 1. **Order from PSG treasurer;** $12.00.

BEHAVIOUR AND ECOLOGY OF THE SEA DUCKS. Ian Goudie, Margaret R. Peterseen and Gregory J. Robertson (editors). Proceedings of the Pacific Seabird Group Symposium, Victoria, British Columbia, 8-12 November 1995. A special publication compiled by the Canadian Wildlife Service for the Pacific Seabird Group. Published 1999 as Canadian Wildlife Service Occasional Paper number 100, catalog number CW69-1/100E. **Order from** Publications Division, Canadian Wildlife Service, Ottawa, Ontario, K1A OH3, Canada. *Free of charge.*

SEABIRD BYCATCH: TRENDS, ROADBLOCKS AND SOLUTIONS. Edward F. Melvin and Julia K. Parrish (editors). Proceedings of an International Symposium of the Pacific Seabird Group, Blaine, Washington, 26-27 February 1999. Published 2001 by University of Alaska Sea Grant, Fairbanks, Alaska. Publication no. AK-SG-01-01. **Order from publisher;** $40.00.

BIOLOGY, STATUS, AND CONSERVATION OF JAPANESE SEABIRDS. Nariko Oka (editor). Proceedings of an International Symposium of the Japanese Seabird Group and Pacific Seabird Group, Lihue, Hawaii, February 2001. Journal of the Yamashina Institute of Ornithology 33(2); Symposium (5 papers), pp 57-147, other papers pp. 148-213. In English with Japanese abstracts. **Order from PSG treasurer;** $75.00.

OIL AND CALIFORNIA'S SEABIRDS. Harry R. Carter (convener) and Anthony J. Gaston (editor). Proceedings of a symposium fo the Pacific Seabird Group, Santa Barbara, California, February 2002. Published 2003 in *Marine Ornithology* 31(1). **Available online** at www.marineornithology.org; ***free of charge.***

Information on presenting symposia: Pacific Seabird Group Symposia are initiated by any PSG member with interest in a particular topic. The goal is to present a collection of papers that explore and review this topic, usually at an annual meeting of the Pacific Seabird Group. In some cases the papers are then edited and published as a PSG Symposium. Anyone interested in organizing a symposium must first contact both the Coordinator of the Publications Committee and the Scientific Program Chair for an annual meeting. Guidelines will be provided on obtaining approval and on organizing, presenting, and publishing a PSG Symposium, including the responsibilities involved.

PACIFIC SEABIRD GROUP COMMITTEE COORDINATORS

Committees do much of PSG's business, as well as the conservation work for which PSG is respected. The committees welcome (and need) participants; contact the coordinators for information.

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Biology of Marbled Murrelets: Inland and at Sea _____x $12.00 $_____

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