

# PACIFIC SEABIRDS



A Publication of the Pacific Seabird Group

Volume 38, Numbers 1 and 2

Spring and Fall 2011

# 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 members include research scientists, conservation professionals, and members of the public from all parts of the Pacific Ocean. The group also welcomes seabird professionals and enthusiasts in other parts of the world. PSG holds annual meetings at which scientific papers and symposia are presented; abstracts for meetings are published on our web site. The group is active in promoting conservation of seabirds, 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's journals are *Pacific Seabirds* (formerly the *PSG Bulletin*) and *Marine Ornithology*. Other publications include symposium volumes and technical reports; these are listed near the back of this issue. 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 \$30 (individual and family); \$24 (student, undergraduate and graduate); and \$900 (Life Membership, payable in five \$180 installments). Dues are payable to the Treasurer; see the PSG web site, or the Membership Order Form next to inside back cover.

## World Wide Web Site

<http://www.pacificseabirdgroup.org>

## Donations

The Pacific Seabird Group is a nonprofit organization incorporated under the laws of the State of California. Contributions to the Pacific Seabird Group are tax deductible to the fullest extent allowed US law (IRS Section 501[c][3]).

## *Pacific Seabirds*

This journal publishes short peer-reviewed articles, reports of ongoing work, conservation news, and other items of importance to conservation of seabirds in the Pacific Ocean. The journal is published twice a year in spring and fall. Materials should be submitted to the Editor, except that conservation-related material should be submitted to the Associate Editor for Conservation. Information for contributors to *Pacific Seabirds* is published in each Fall issue and is on PSG's web site. Editorial policies accord with those of PSG's Executive Council; in other matters the journal aims for an unbiased point of view. Back issues of the *PSG Bulletin* and *Pacific Seabirds* are posted on the group's web site or may be ordered from the treasurer (see Membership/Order Form next to inside back cover for details). Submission deadlines are 20 March for the spring issue and 20 September for the fall issue; manuscripts may be submitted at any time.

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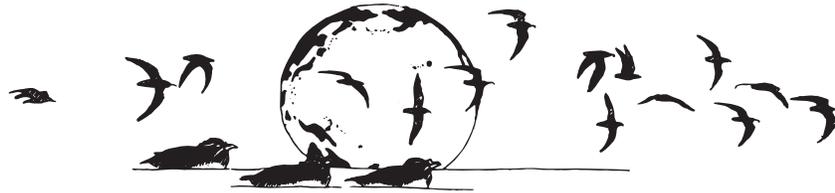
*Marine Ornithology* presents peer-reviewed contributions concerning international seabird science and conservation. The journal is published two times a year. It is available on its web site or by subscription. The journal is supported by a partnership of global seabird societies, including the Pacific Seabird Group (PSG), African Seabird Group, Australasian Seabird Group, the Seabird Group (UK), Dutch Seabird Group, and Japan Seabird Group. For further information see [www.marineornithology.org](http://www.marineornithology.org)

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# SPECIAL SECTION: HOW THE PACIFIC SEABIRD GROUP AND ITS EXECUTIVE COUNCIL WORK

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Questions have been raised recently about how PSG functions, what keeps it afloat financially, how EXCO runs, and about the duties and legal obligation of EXCO members. The following articles provide insight and some expert answers.

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## HOW PSG RUNS

By Pat Baird and Vivian Mendenhall

PSG is a group of people—scientists, conservationists, students—who are passionate about seabirds. We get together at Annual Meetings to share new research, make contacts, and have a great time. Annual meetings are one of PSG's most important functions. PSG has once every year since 1973 (on average, that is—there have been occasional years with two or zero meetings).

But PSG is much more, too. Many members aren't aware that PSG is an important player in national and international conservation. The group is also a legal entity, a not-for-profit corporation (NGO) under the laws of the state of California; this status carries both benefits and special obligations.

The objectives of PSG are exclusively scientific, educational, conservation-oriented, and nonprofit. In essence, PSG does several things: (1) PSG brings researchers together annually to discuss their latest findings; (2) PSG comments publicly on various conservation issues that EXCO deems important to seabirds and marine biology; (3) PSG provides mentoring for people who are just starting out in the field of seabird biology, by putting them in contact with established researchers at the annual meetings; and (4) PSG supports conservation throughout the Pacific region, through the Corresponding Members Committee and via small grants from the Craig

Harrison Conservation Fund. PSG also (5) educates the scientific and general public about the ecology and importance of Pacific seabirds and their environment, by holding our open meetings and by publishing journals and symposia.

EXCO is obligated to follow the objectives and to carry out the duties outlined in the Bylaws and Handbook. EXCO, in essence, keeps the ship of PSG on course—heading towards its goals, making sure that it follows the Bylaws, reflects the members' priorities, and stays fiscally sound. PSG has always been fiscally conservative, because it relies on its financial security to accomplish important things, from scientific meetings to conservation.

PSG members are welcome to observe EXCO meetings (see accompanying articles for further information about EXCO.) The Minutes of each EXCO meeting, once they are approved by EXCO (which is usually done at the following meeting) are posted on PSG's website. A summary of each Minutes (more digestible than the full original) also appears in *Pacific Seabirds*.

### WHAT DOES PSG DO, AND WHO DOES IT?

What most members associate with PSG are annual meetings (see below), publications, our web site, and (for some members) our Twitter account. But a large share of PSG's important work happens in the background.

PSG comments regularly on conservation issues that concern seabirds. PSG's public statements are highly respected, because we are conservative and make sure that all statements are backed up by science. This means we can often make a difference in events that impact seabirds. Letters to agencies, corporations, and others are coordinated by the Vice-Chair for Conservation, in consultation with the current Chair. Our expertise is provided by PSG members, particularly PSG's specialist committees. Some of these committees also produce technical manuals, draft Endangered Species petitions, and do other work. Most committee members are not on EXCO, and of course they are 100% volunteer. (They would welcome your help!).

PSG also has representatives to the American Bird Conservancy and the Ornithological Council (OC). They inform the conservation community of PSG's concerns, and they help keep EXCO informed of current issues (one example is the OC's recent work on federal rules for collecting permits).

EXCO meets twice a year to oversee the activities and finances of PSG. Among other things, EXCO reviews and approves all plans and budgets for annual meetings, reviews the activities of committees, and approves (or sometimes rejects) public statements proposed by PSG committees.

## SPECIAL SECTION • How PSG runs

### HOW DOES PSG FUND ITSELF?

The main sources of income for PSG are the annual meetings and, secondarily, members' dues. We occasionally do get small grants from the government or foundations. However, these are often explicitly directed to a particular product (such as travel to meetings, to run a particular meeting, or to mount a specific symposium). Some of the donations raised for the Girdwood meeting in 2006 are examples of "restricted" donations for a specified purpose. Other small donations arrive year-round, but most are also "restricted"; these include donations to the Craig S. Harrison Conservation Fund for small grants; and Lifetime Memberships, which are dedicated in the Bylaws to the Endowment Fund.

Please note that most donations result from huge efforts on the part of PSG's volunteers, especially the Local Committees that arrange each annual meeting. (Big nonprofits rely on a full-time "Development Officer" to raise money, but that's out of our league!)

The annual dues of members provide a stable income for PSG—enough to pay for accounting, and for filing of the fiscal reports that are required by California and the federal government. One can think of dues as PSG's stable foraging source.

### WHAT ARE PSG'S EXPENSES?

PSG's principal expense each year is the Annual Meeting. Our next largest expenditures are for publications (*Pacific Seabirds*, *Marine Ornithology*, and occasional symposia), and grants from the Craig S. Harrison Conservation Fund (described below).

Our regular operating expenses include prosaic items such as telephone bills, postage, board liability insurance, and accountants' fees. PSG's annual budget is usually published in *Pacific Seabirds*.

### ANNUAL MEETINGS

Meetings are important for science and communication. They also are PSG'S largest financial undertaking, with budgets usually in the low six figures. On average, meetings make a modest profit,

which is a major source of revenue for PSG. Most of the money raised for each meeting is used to run it, paying for such things as rental of meeting spaces and audio-visual equipment, travel costs for plenary speakers, small travel grants to students and others, hors d'oeuvres at evening receptions, and those coffee and snack breaks between papers.

Each meeting is the result of over a year of work by the Local Committee. The Chair-Elect also spends months on the scientific program. EXCO and other experienced members review all arrangements and approve the meeting's budget well beforehand.

Income for a meeting comes from registration (the largest portion), exhibitors' fees, auctions, and donations. Any profit that PSG makes from a meeting goes into the General Operating Fund to run PSG (except that proceeds from the Student Auction are dedicated to student travel awards). The Operating Fund also provides the Local Committee with start-up money when they first book a hotel (as much as a year before the meeting) and for other "up-front" expenses such as travel grants. The Operating Fund is reimbursed later from the meeting's income.

Annual meetings are the icing on the cake, but they also provide part of the funding for the necessities of running an organization. Think of meeting profits as an opportunistic but fluctuating source of food—sometimes superabundant, but in occasional years next to nothing. The profit from annual meetings is necessary to keep PSG running, and to cushion it from unexpected events (like the 2007 Recession).

Some PSG annual meetings have made money; some have broken even; but a few have lost money. Local Committees work hard at raising money to help run each annual meeting. Sometimes they succeed in raising a lot (e.g., at Girdwood in 2006), but occasionally they have little success.

### MEMBERS MEETING

All PSG members are invited to the annual Members Meeting (also called

the Business Meeting), near the end of each Annual Meeting. The Chair informs the members of PSG's current affairs, as dealt with in the EXCO meeting held a few days previously. This is the members' chance to speak out to EXCO and the Chair on any PSG issue.

PSG members as a whole sometimes vote on resolutions at the Members Meeting. As an early example, PSG's conservation initiatives for Marbled Murrelets began in 1982, when a resolution was sent to government agencies that stated the birds were declining and should be taken into account during the management of forests. Resolutions are submitted to EXCO for approval before going to the Membership Meeting.

### ENDOWMENT FUND

The Endowment Fund is used to support production of PSG's publications. It receives all dues from Lifetime Memberships, plus donations, bequests, and other sources. The fund's investments are managed by the Treasurer and two other Trustees. They recommend a very conservative annual ceiling on expenditures from the fund, so as to protect its principal over time. The actual expenditure of funds is recommended by the Communications Committee and decided by a majority vote of the Executive Council. Money from the Endowment Fund can be used only for the production of Pacific Seabird Group-sponsored publications, including *Marine Ornithology*.

### CRAIG HARRISON CONSERVATION FUND (SMALL GRANT PROGRAM).

This fund was started because worthy seabird conservation projects could be accomplished at minimal cost in many locations in the Pacific, yet most regions lacked a vehicle for providing even small grants. This lack of support is most acute in developing nations. The objective of PSG's fund is to advance the conservation of seabirds by offering modest support for conservation projects in developing countries bordering the Pacific Ocean. Applications are also considered from people who reside elsewhere but are primarily working in those countries.

## SPECIAL SECTION • How PSG runs

Applications for Conservation Small Grants can be made at any time; information is on PSG's website. The committee accepts applications, reviews them for merit and for consistency with the goals of the Small Grant Program, and decides on awards.

Projects must promote conservation and restoration activities that benefit seabirds in the Pacific Ocean. (Projects in seas adjacent to the Pacific also may be considered.) Pure research (not immediately applicable to conservation)

is ineligible. Among other priorities, PSG wants to support development of in-country seabird expertise in developing nations.

The Conservation Fund's money comes from specified donations to PSG, plus any general funds that EXCO wishes to authorize. In general the Conservation Fund tries to be independent of PSG's Operating Fund by relying on donations. Specific donations to the fund can be made by members when renewing PSG

membership, registering for annual meetings, or at any time via PSG's website.

The Conservation Fund is administered by a committee of seven people (including the Vice-Chair for Conservation, who is an *ex officio* member). The committee evaluates applications and makes decisions on grants, except that grants above \$2000 must be approved by EXCO. The number of grants approved each year is limited by the amount of money in the Conservation Fund's account.

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## HOW THE PSG EXECUTIVE COUNCIL WORKS

By Pat Baird

As the Elections Chair, I often ask people if they want to be on the Executive Council (EXCO) of PSG. I am most often met with a question similar to, "Well, what exactly does EXCO do, and what would be my role on it?" This is a valid question, and below is a summary of what EXCO does and the role of each board member.

### WHAT EXCO DOES

The Executive Council is PSG's Board of Directors. (As a nonprofit corporation, PSG is required to have a Board of Directors.) Specific duties of PSG's officers and the regional representatives can be found in the Bylaws and handbook; both are available on PSG's website. In essence, EXCO runs PSG and makes sure that PSG is fulfilling its mission statement and goals. EXCO also is required by law to ensure that PSG is fiscally sound.

The role of each EXCO member is to work for the maintenance and advancement of PSG as an organization. EXCO is vested with a fiscal responsibility to PSG. If there is a conflict of interest between what any EXCO member proposes, and the objectives of PSG, the interests of PSG must come first and foremost. (This is explained further below and in an accompanying article.)

### DUTIES OF EXCO MEMBERS

**Chair**—The Chair of PSG is responsible for carrying out the objectives, policies, and programs developed by the Executive Council and membership for all administrative decisions, duties, and activities. The Chair presides over meetings of EXCO and the full membership at PSG's annual meetings, and over mid-year EXCO meetings held as conference calls. The Chair ensures that meetings are run efficiently, while allowing all

views to be discussed, and (together with the Secretary) that EXCO's decisions are properly approved and recorded.

The Chair acts as official spokesperson for the group. S/he plays a central role in initiating, editing and distributing PSG policy statements, keeps abreast of conservation issues (in cooperation with the Vice-Chair for Conservation), and takes the lead on PSG concerns and issues. The Chair is also an *ex officio* member of all committees and reviews Committee decisions before major public action. The Chair investigates and pursues sources of funding and oversees contracts. S/he creates an annual work plan, in conjunction with the Secretary, based on Action Items noted at the EXCO meeting. The Chair sits on the Awards Committee.

The Chair is responsible for the Annual Meeting, working closely with the Chair-Elect and the Local Committee.

## SPECIAL SECTION • How EXCO works

S/he is Mistress/Master of ceremonies at the banquet. Finally, the Chair writes a “Message from the Chair” for *Pacific Seabirds* each year.

**Chair-Elect**—The Chair-Elect will become Chair in the following year. S/he also has the major duty of Scientific Program Chair for the annual meeting. S/he helps select plenary speakers, chooses symposia, sends out the call for papers, organizes the scientific program, and works with the Local Committee to organize the Annual Meeting. The Chair-Elect also sits on the Awards Committee.

**Past Chair**—The Past Chair (who was the previous year’s Chair) aids the Chair in running PSG. S/he gives information EXCO on the location of the next Annual Meeting, the proposed site of the meeting to be held two years in the future, and a choice of two or three sites for the meeting to be held in three years. S/he assists the Chair-Elect and Local Committee Chair to make sure that the Annual Meeting runs smoothly, and that the budget and registration fees are accurate and appropriate. S/he chairs the Awards Committee (whose other members are the Chair and Chair-elect); the committee solicits nominations for the PSG awards, recommends nominees to EXCO for approval, and arranges payment for recipients’ travel, food, and lodging. The Past Chair solicits applications for travel awards and organizes the judging of student paper awards. S/he solicits grants and donations to help pay for travel awards to the Annual Meeting. The Past-Chair also recommends to the Chair how much money should be used from the current meeting budget. S/he hands out travel awards and student paper awards at the banquet, as well as the Lifetime and Special Achievement Awards. Finally, The Past Chair attends the Former Chairs Committee meeting.

**Vice-Chair for Conservation**—The Vice-Chair for Conservation acts on priority conservation issues at public forums and through written comments. S/he is responsible for initiation and coordination of conservation-related activities of PSG. Any member can

report a conservation issue of concern to the Vice-Chair for Conservation, who will decide whether just to summarize the issue in the next volume of *Pacific Seabirds*, or to start the process of writing a formal statement from PSG to agencies and others involved in the issue. The Vice-Chair for Conservation identifies and keeps informed on issues pertaining to the conservation of seabirds, and prepares information on high-priority conservation issues. S/he distributes that information to the membership and others interested in seabird conservation, and acts for PSG as directed by the Chair on priority conservation issues at public forums and through written comment. The Vice-Chair for Conservation (or a designated assistant) compiles a Conservation Report for each issue of *Pacific Seabirds*, and s/he holds a Conservation Committee meeting at each Annual Meeting.

**Treasurer**—The fiscal affairs of PSG are under the supervision of the Executive Council and are handled by the Treasurer. S/he keeps a list of current members and maintains an accounting of PSG funds. S/he receives applications for individual and institutional memberships, as well as requests for back issues of *Pacific Seabirds*. The Treasurer also serves on the Investment committee. The Treasurer receives money from dues and sales of all PSG publications, and s/he designs and mails membership renewal notices. S/he reimburses persons authorized to spend PSG money, and completes income tax statements and annual reports for the state of California and the federal government. The treasurer also provides information to granting entities and completes the paperwork for various grants and donations that PSG receives. The Treasurer provides an annual report to EXCO and the PSG members, and proposes the next year’s budget for EXCO’s approval. The Treasurer especially, as well as the entire EXCO, is vested with a fiscal responsibility to PSG, and therefore must keep PSG’s interests in mind during any financial transaction. If there is a conflict of interest between what any of the EXCO members propose

fiscally, and the objectives of PSG, PSG’s objectives of PSG must come first and foremost.

**Secretary**—The Secretary takes minutes at all Executive Council meetings, both at the annual meeting and during mid-year conference calls. S/he is responsible (together with the Chair) for recording the motions and votes of EXCO correctly. The Secretary distributes the minutes to all EXCO members, who may suggest corrections, and who will approve the minutes at the next meeting. The Secretary writes up a summary of the minutes for publication in *Pacific Seabirds*.

The Secretary assists the Chair and others with a variety of other duties, and s/he creates an annual work plan in conjunction with the Chair, as a result of Action Items developed at the EXCO meeting. The Secretary coordinates with the Elections Committee chair on preparing a notice of request for nominations. The Secretary maintains and updates the PSG Handbook, investigates the need to update the Bylaws, and provides the Bylaws and Handbook to new EXCO members.

**Regional Representatives**—Regional Representatives have been members of EXCO since its inception, to ensure geographic diversity on the board. They function as clearing-houses for region-specific information. However, like all board members, they are obligated to do what is best for PSG and its members as a whole, not for their regions or for local members.

Each Regional Representative contacts his or her members for information on the past year’s research and other activities, compiles a summary of the responses, and sends it to the editor of *Pacific Seabirds* for publication in the Fall issue each year. Regional Representatives send information on important conservation issues in their regions to the Chair or Vice-Chair for Conservation. They maintain contact with local conservation groups, so that these groups and PSG are aware of each other’s activities. They are the local PR for PSG.

## SPECIAL SECTION • How EXCO works

**Student Representative**—A current student (undergraduate or graduate) is elected by other students in PSG to represent their concerns on EXCO. (*Note:* Students are eligible to run for *all* other positions on EXCO as well, from Regional Representative to Chair-elect.)

**Communications Coordinator** and **Editor of *Pacific Seabirds***—These two members are appointed by EXCO (so you won't be asked to run for election to the positions). They are both *ex officio* (non-voting) members of EXCO.

### HOW LONG DO EXCO MEMBERS SERVE, AND HOW ARE THEY SELECTED?

Most EXCO members are elected for a two-year term, and can be re-elected indefinitely. A Chair-Elect is chosen each year; s/he is the Chair the following year, Past Chair the next year, and then can relax again (except for joining the Former Chairs Committee). Half the Regional Representatives are elected in even-numbered years, the other half the following year.

Each EXCO serves for approximately one year, from the end of an Annual Meeting banquet until the end of the next one. A list of EXCO members for each year is on PSG's website and on the inside back cover of *Pacific Seabirds*.

The Elections Chair looks for EXCO candidates among PSG members, and then sends out ballots, usually near the end of each calendar year. Regional Representatives are elected only by members in their Regions, and the Student Representative only by students; the rest of EXCO is selected by the entire PSG membership.

### HOW DO PSG MEMBERS COMMUNICATE WITH EXCO?

EXCO welcomes (indeed, hopes for) the involvement of other PSG's members in the affairs of PSG. Members can express their concerns to EXCO in several ways.

Any member can attend a meeting of EXCO and observe it in action. Non-members of the council can comment on an issue by contacting an EXCO member, who can bring the comment to the council's attention, or may arrange for the member to speak. (People who are not members of EXCO normally need an invitation to speak at a council meeting, in the interests of efficiency.)

A member can also attend the annual Members Meeting (also called the Business Meeting), hear what EXCO has recently done, and speak to EXCO and the Chair. The Members Meeting is described in the previous article.

The best way to interact with EXCO is, of course, to run for a position on the council!

### FORMER CHAIRS

After serving the three-year series of Chair-Elect, Chair, and Past Chair, PSG still doesn't let you go—it welcomes you to the realm of the Former Chairs, who meet once a year at the Annual Meeting. The idea is to bring the wisdom and experiences of PSG Former Chairs together to advise and guide the organization on key issues. There is a need for institutional memory in PSG, and the Former Chairs group satisfies this need. The main duty for the Former Chairs is to oversee nominations of candidates for PSG Lifetime Achievement and Special Achievement Awards.

Other issues that pertain to the long-term success of PSG may also be discussed by the Former Chairs. Examples could be how to improve our major journal, *Marine Ornithology*, or whether it would strengthen the governance of PSG to add members to EXCO from professions other than seabird work, if they had former board experience and skills that could benefit PSG. The chair of the Former Chairs is the most recent Past Chair. The current Past Chair attends the meeting, so that s/he knows what to expect on joining this august group.

### OBLIGATIONS OF THE MEMBERS OF EXCO

Since EXCO is the Board of a corporation, its members have certain obligations. (Over the years, EXCO members have normally done these things without needing to think about them.) Essentially, every member of a board—whether that of a big for-profit corporation or a small nonprofit—is required act in the best interests of the organization. They have a duty to keep informed about the organization's affairs, do their best to keep the organization on a sound footing (both structurally and financially), and act in the best interests of the organization. The last duty means they must carefully avoid conflicts of interest. If any member has interests or concerns that could conflict with his/her duty to PSG, that person should abstain from EXCO's discussions and voting on the issue. This important point is explained further in the next article.

A successful board, such as EXCO has always been, consists of members working together do what is best for PSG.

## SPECIAL SECTION

# THE LEGAL OBLIGATIONS OF EXCO MEMBERS

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There have been questions recently about the duties of Executive Council members, if some members also belong to another organization—especially if PSG and the second group disagree about money. The Chair of the Pacific Seabird Group, Pat Jodice, requested in January 2012 that Craig Harrison provide legal information to EXCO about the members' duties in such a situation. Harrison is a member of EXCO and a practicing attorney.

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## WHAT ARE THE OBLIGATIONS OF EXCO MEMBERS TO PSG?

By Craig S. Harrison, January 2012

(Explained more fully in the following legal memorandum from Arnold & Porter; the memo and other information also are available on the Web by entering "Fiduciary duties and conflicts of interest" in Google)

1. **FIDUCIARY DUTY.** All officers and directors of nonprofit corporations have fiduciary obligations to the corporation. This means that EXCO members must act at all times to protect the interests of PSG in a prudent manner. A fiduciary duty is the highest standard of care and a fiduciary must put the interests of PSG over any personal interests, whether or not that personal interest involves actual or potential financial or other benefit.
2. **DUTY OF LOYALTY.** As fiduciaries, all EXCO members owe a duty of undivided loyalty to PSG, good faith, full disclosure and fair dealing. Any proposed transaction must actually be in the best interest of PSG.
  - a. **Conflicts of Interest.** The duty of loyalty includes a director's obligation to avoid conflicts of interest. Anyone with dual loyalties must disclose the situation and in most cases be excluded from participating in decisions. A breach of this duty may result in personal liability for the director. A conflict generally exists when PSG does business with an entity in which a director or officer of PSG is also a director, officer, employee, consultant or agent of the second entity, or with an individual or group of individuals undertaking activities that are or may be contrary to the best interests of PSG. (See pages 8-11 for further details on conflicts of interest.)
  - b. **Good Faith.** The duty to act in good faith prohibits members of the board of directors from: (1) failing to act in the face of a known duty to act; (2) acting in a manner unrelated to a pursuit of PSG's best interests; and (3) maintaining a sustained or systematic failure to provide oversight.
3. **DUTY OF CARE.** The directors have a responsibility to inform themselves about an issue before making a business decision about that issue. Where expertise is not available on the EXCO, they should consult outside experts. They must ensure that PSG has adequate resources to carry out its mission. EXCO members must act with the care an ordinarily prudent person in a like position would exercise under similar circumstances.
4. **DUTY OF OBEDIENCE.** The directors must insure that PSG does not engage in activities that applicable law, its articles of incorporation, or its bylaws forbid. Any funds spent should be consistent with PSG's mission as stated in its articles of incorporation and bylaws and its priorities.

# LEGAL OBLIGATIONS OF A DIRECTOR

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The following memo provided by Craig Harrison gives a full description of an EXCO member's duties, especially if there is a conflict of interest. The memo and other information also are available on the Web by entering "Fiduciary duties and conflicts of interest" in a search engine.

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## ARNOLD & PORTER LLP

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### Memorandum

**From:** James P. Joseph  
Arnold & Porter LLP

**Date:** May 8, 2006

**Re:** Fiduciary Duties of a Director and Conflicts of Interest

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The following is an overview of the duties of a member of a board of directors of a nonprofit corporation ("Corporation"), with particular emphasis on the financial management of the Corporation.

A director owes a fiduciary duty to the Corporation. In performing his or her duties, a director must act in the best interests of the Corporation (*e.g.*, work to fulfill the Corporation's tax-exempt purposes and maintain its tax-exempt status). The director may not act in a way that is detrimental to the Corporation in an effort to benefit any third party. The director must disclose to the other members of the board of the Corporation when the board's actions may have a material impact on the director or another corporation or entity in which the director has a financial interest. The director must not participate in any board discussion or vote on such issues, unless the board determines that the director may so participate. If the board determines that the director may participate, the director may still decide that a conflict exists and that he or she should not participate in any discussion or vote.

### **I. General Duties That a Director Owes to the Corporation**

The duties that a director owes the Corporation are the *duty of obedience*, the *duty of care* and the *duty of loyalty*. In general, under the "business judgment rule," if a board of directors properly exercises these duties, its members will be protected from liability for their actions on the board. In effect, there is a presumption that, in making a business decision, the directors acted on an informed basis, in good faith and in the honest belief that the action was taken in the best interest of the Corporation. This presumption can be overcome with a showing that the board acted with gross negligence.

#### **A. Duty of Obedience**

- The directors of the Corporation must not engage in *ultra vires* acts—acts that the corporation, under its charter and applicable law, can not perform because such acts are prohibited or beyond the scope of the corporation's powers.

#### **B. Duty of Care**

- The duty of care generally describes the level of attention required of a director in all matters related to the Corporation. The duty of care is perhaps more accurately described as a "duty to be informed."

- A director has the responsibility to be informed about an issue before making a business decision relating to the issue.
  - A director will fulfill the duty of care if, prior to making a decision, he or she considers all material information reasonably available to him or her.
  - To fulfill the duty of care, the directors of a Corporation should follow deliberate procedures and consult with appropriate committees, officers, or employees of the Corporation or other outside experts in making corporate decisions.

### **C Duty of Loyalty**

- The duty of loyalty requires a director to act *solely* in the best interests of the Corporation rather than in his or her own interests, or those of his or her associates.
- One important aspect of the duty of loyalty is to retain the confidentiality of information that is explicitly deemed confidential by the Corporation, as well as information that appears to be confidential from its nature or matter.
- The duty of loyalty also encompasses a director's obligation to avoid conflicts of interest.
  - For a director, a violation of this duty may result in personal liability for a breach of fiduciary duty.
  - For the Corporation, such a breach may allow a court to void the corporate transaction in which a conflict was present.

## **II. Conflicts of Interest**

- In general, a conflict of interest exists when the Corporation does business with:
  - a director of the Corporation;
  - another entity in which a director of the Corporation is also a trustee, director, officer, employee, consultant, or agent; or
  - another entity in which a director has a financial interest (a "financial interest" can generally be defined to include an ownership or investment interest in the entity with which the Corporation is contracting, or a compensation arrangement with such entity).
- To avoid even the appearance of a conflict of interest, a director may want to treat as a conflict any transaction between the Corporation and (i) the director's spouse, descendants, or ascendants, (ii) any entity in which such a relative is a trustee, director, officer, employee, consultant, or agent, or (iii) any entity in which such a relative has a financial interest.
- In addition, the Corporation may have its own conflict of interest policy that must be followed.
- If a conflict of interest is or may be present, the director must:
  - Disclose to the board of directors or relevant committee of the board the material facts as to his or her relationship or interest.
  - Not participate in any board discussion or vote, unless the Corporation's board determines that the director may participate in such discussion or vote.
- If the board determines that the director may participate, the director may still decide that a conflict exists and that he or she should not participate in any discussion or vote.
- If a director follows these disclosure and recusal procedures, a party challenging a transaction on the grounds of a conflict of interest/breach of fiduciary duty will face a heightened burden.

### **III. The Duty of Care: Financial Management Obligations**

In general, under the “business judgment rule,” if a board of directors properly exercises the fiduciary duties discussed above, its members will be protected from liability for their actions on the board. In effect, there is a presumption that, in making a business decision, the directors acted on an informed basis, in good faith and in the honest belief that the action was taken in the best interest of the Corporation. This presumption can be overcome with a showing that the board acted with gross negligence. Despite the relatively significant burden of trying to prove gross negligence by a nonprofit director, and despite the protections of the business judgment rule, nonprofit directors can be held responsible when an organization’s finances are poorly managed.

**A. General Mismanagement.** This type of mismanagement is characterized by a pattern of actions or inactions that result in significant harm over a period of time. In one case, *Lynch v. John H. Redfield Foundation*, 88 Cal. Rptr. 86 (Cal. Ct. App. 1970), the directors of a foundation allowed the organization’s income to accumulate in non-interest bearing accounts for over five years. This investment decision was made as a result of longterm disagreements among the directors that resulted in their inability to productively manage the foundation’s assets. As stated by the court: “All three directors, in concentrating on their feud, left the foundation in a state of suspended animation for several years, ignoring their obligations to carry on its charitable purposes and to manage its assets with a degree of care and diligence which a prudent man would exercise in the management of his own affairs.” *Id.* at 88. Although in the above case a feud was to blame for the financial mismanagement, more often such mismanagement is a result of neglect. More rarely, claims are made challenging the directors’ decision-making. These claims often involve a single action, such as sale of an asset below value, and also often involve specific action by a board, rather than simply inattention.

**B. General Neglect.** The term “good faith” most obviously means an absence of any intent to take advantage of the corporation. It is largely a state of mind characterized by both “honesty” and “faithfulness to the director’s duties and obligations.” “Honesty” has been appropriately interpreted to mean “pureheartedness.” “Faithfulness to the director’s duties and obligations,” however, is more than a mindset. It means some level of diligence in actually seeking to discharge the director’s responsibilities. General neglect in decision-making, therefore, would not be good faith. In the leading case of *Stern et al. v. Lucy Webb Hayes National Training School for Deaconesses and Missionaries, et al.*, 381 F. Supp. 1003 (D.D.C. 1974), the board of directors was found to have breached its fiduciary duty in part for allowing, through inaction and inattention, the reserve fund of the corporation to languish in investment vehicles that paid very low interest rates or no interest at all.

**C. Bad Business Decisions.** These type of claims are often characterized as a “waste of corporate assets.” Because of the business judgment rule, discussed above, these claims are difficult to prove. In one case, *Mary v. The Lupin Foundation*, 609 So.2d 184 (La. 1992), a non-profit corporation sold its sole asset, a hospital, to a for-profit health care company for \$17.5 million. A member of the non-profit board who objected to this sale sued his fellow board members, alleging that the market value of the hospital was as much as \$5 million above the sale price, and that the sale below value was a breach of their fiduciary duty. This director further alleged that the board never solicited other offers or made an attempt to value the hospital. The court held that these allegations, if true, would constitute a violation of the directors’ fiduciary duty.

**D. Mismanagement of Investments.** The duty of care includes, and in fact mandates, that the board protect the assets of the Corporation. This includes the general management and investment of all of the Corporation’s funds.

- **A Reasonable Plan.** A board is not an insurer of the adequate performance of a Corporation’s funds in an investment vehicle, but investment decisions must be reasonable and defensible. The leading case in this area is *Johnson v. Johnson*, 516 A.2d 255 (N.J. Super. 1986). In this instance, the dispute involved the investment of funds owned by two charitable foundations. After a detailed review of various investment approaches, the court concluded that the individual in charge of investments had pursued a reasonable investment strategy. What is important about this case is that the defendant’s investment approach was unsuccessful. Nonetheless, the court found that the defendant had pursued a reasonable course of action.

- **Outside Advice.** Directors are not expected, or legally required, to be experts in the stock market or other investment vehicles. Retention and reliance on an investment advisor with a good reputation is more than reasonable; it is an effective protection for the board, even if the advice given ultimately is flawed. For example, in one case, a court found that a nonprofit board’s failed investment decisions did not violate its fiduciary duties where they were “based, in part, on research provided by the [organization’s] analysts and conforming to guidelines set forth by various investment strategy groups

composed of senior portfolio managers, who regularly monitored the suitability of equity investments and rate securities in various categories based upon performance.” *In the Matter of Bankers Trust Company*, 636 N.Y.S.2d 741 (A.D.2d 1995).

- **Oversight.** In the vast majority of cases, nonprofit directors have incurred liability related to investments not because investments knowingly made simply underperformed, but rather, when the directors have delegated investment responsibility to an individual or committee, and then failed to oversee or supervise that person/entity. The leading case is *Stern v. Lucy Webb Hayes National Training School For Deaconesses & Missionaries*, discussed above, where the delegation of authority was permissible, but the board never sought or received a report as to the status or performance of the invested funds.

- **Delegating or Abdicating Authority.** While, as discussed above, it is not unusual for a nonprofit board to delegate investment responsibility (e.g., to a committee or individual director or staff member), boards should document such a delegation and be clear as to the scope of the delegation. A number of cases involving negligent investment liability arise out of the conduct of just one corporate officer or director who, through neglect or otherwise, is granted broad discretion which he or she ultimately abuses. In *Hoye v. Meek*, 795 F.2d 893 (10th Cir. 1986), the president of a company delegated investment responsibility to his son, also an employee of the company. While the son was subject to a board policy restricting investments to supposedly-safe government securities, he managed to make such investments in a very risky manner, with disastrous results. Although the President and other board members received monthly reports as to the finances of the organization, no action resulted from reviewing the reports that were provided. The court found the president liable for the losses.

- **Uniform Act.** Virtually all States have adopted the Uniform Management of Institutional Funds Act, which is generally applicable to directors of charitable corporations. This legislation essentially codifies a corporate standard of care for investment activity. A typical State statute provides as follows: In the administration of the powers to appropriate appreciation, to make and retain investments, and to delegate investment management of institutional funds, members of a governing board shall exercise ordinary business care and prudence under the facts and circumstances prevailing at the time of the action or decision. In so doing they shall consider long- and short-term needs of the institution in carrying out its educational, religious, charitable, or other eleemosynary purposes, its present and anticipated financial requirements, expected total return on its investments, price level trends, and general economic conditions. D.C. Code § 32-406.

# CONSERVATION REPORT

Compiled by Jo Smith

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This Conservation Report marks a change for *Pacific Seabirds*: Jo Smith is taking over the task of compiling the report from Craig Harrison. This report covers the period 1 August to 31 December 2011.

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## NEW ZEALAND SCIENTISTS CONFIRM EXISTENCE OF STORM-PETREL THOUGHT TO BE EXTINCT

Bruce Robertson, University of Otago, confirmed on 26 September 2011 that the New Zealand Storm-Petrel is a distinct species of seabird, rather than an extinct plumage variant or subspecies, and hence is worthy of a species recovery program. The news was published online in the journal *Molecular Phylogenetics and Evolution* by Bruce Robertson, Brent Stephenson of Eco-Vista, and Sharyn Goldstien of Canterbury University. The authors used DNA to confirm this finding conclusively, using samples taken from museum skins and recently captured birds.

The history of this story dates back to two events in 2003: storm-petrels flew into the wheelhouse of a fishing vessel operating in the Hauraki Gulf, New Zealand, and in a separate event, several birdwatchers photographed and videotaped at least 10 more individuals north of Little Barrier Island. All of these birds were identified as the extinct storm-petrel species.

Fortunately, evidence for the New Zealand Storm-Petrel is curated at museums in England and France. However, the evidence exists only as three museum skins collected in the 1800s. Samples from two of the three 150-year-old skins were tested and matched against blood samples collected from the birds in 2003. The authors found the tissues matched and confirmed that all of these birds are *Oceanites maoriana*. New Zealand scientists are interested in gathering more information, in particular identifying the

breeding site locations. They also hope for the species to become a conservation priority, which would lead to a recovery program.

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## BAY OF PLENTY SPILL IN NEW ZEALAND KILLS AT LEAST 2000 SEABIRDS

Sandy Bartle, Te Papa curator, Wellington, New Zealand writes to confirm that close to 2000 seabirds have been recovered dead off the beaches in the Bay of Plenty, New Zealand, following the *Rena* shipwreck earlier this year. On 5 May 2011, the *Rena*, a 47,000-ton container vessel, struck a well-charted reef while cruising at 17 knots towards the nearby port of Tauranga. Both the Master and Officer of the Watch have been charged. The vessel is registered in Liberia, owned by a Greek firm, and chartered by an Italian one.

Over 350 tons of oil have been released into the sea to date, much of it soaking onto the popular beaches nearby; at least another 1000 tons of bunker oil remain on board. Tidal movements and wind have spread the oil along about 96 km (60 miles) of coast, from Waihi to Matata. Oil also has gone out to sea, as far as White Island, a large gannet (*Morus serrator*) colony.

According to Bartle, a well-organized bird-recovery effort is operating under Massey University's National Marine Oil Spill Contingency Plan. All the endemic and rare New Zealand Dotterels (*Charadrius obscurus*) that breed in the area have been captured and are being cared for on the site; none were oiled. Fewer than 70 seabirds, mostly Blue

Penguins (*Eudyptula minor*), have been cleaned and are in temporary captivity.

Te Papa curators Sandy Bartle, Colin Miskelly, and Alan Tennyson, as well as Karen Baird of Forest and Bird, have worked tirelessly to identify the birds. About 25 seabird species have been affected by the oil so far, from the locally-breeding Fluttering Shearwaters (*Puffinus gavia*) and Diving Petrels (*Pelecanoides* sp.) to non-breeding visitors from the Indian Ocean, such as Blue Petrels (*Halobaena caerulea*), Antarctic Prions (*Pachyptila desolata*), and a Wandering Albatros (*Diomedea exulans*).

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## INCIDENTAL TAKE OF SHORT-TAILED ALBATROSSES IN FISHERIES OFF ALASKA AND OREGON

On 31 October 2011, the National Oceanographic and Atmospheric Administration (NOAA)–Fisheries reported the incidental take of an endangered Short-tailed Albatross (*Phoebastria albatrus*; STAL) in the hook-and-line groundfish fishery in the Bering Sea. This brings the documented number of STAL dead from fisheries bycatch in Alaska to three since the start of 2010. The bird was taken on 25 October 2011 at 56° 35' N and 172° 52' W. Seabird bycatch in the hook and line fishery usually occurs while the gear is being set behind the stern of the vessel; the bird seizes bait from a hook, becomes caught, and is drowned when the line sinks. The bird had an identifying leg band from its natal breeding colony in Japan and was less than two years old.

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The previous two STAL were caught in this fishery in August and September 2010; the August 2010 take was located very close to this recent one. The world population of the endangered Short-tailed Albatross is currently estimated at about 3,500 individuals. For information on the 2010 bycatch of STAL, see *Pacific Seabirds* 37(2):28.

The Short-tailed Albatross is listed as endangered under the US Endangered Species Act (ESA), which gives it protection in US waters. The U.S. Fish and Wildlife Service (USFWS) is responsible for evaluating threats to the STAL. The agency issues Biological Opinions on potential threats from fishing in federal waters (between 3 and 200 miles from US shores), and it can dictate limits on fishing operations. The limit on incidental take of STAL hook-and-line groundfish fisheries of the Bering Sea/Aleutian Islands Management Area (BSAI) and the Gulf of Alaska (GOA) is four STAL during each two-year period. If the number of incidentally taken STAL reaches this limit, NOAA must re-initiate formal consultation with USFWS under the ESA. The STAL taken in October 2011 is the first in the two-year period that began on 16 September 2011.

NOAA–Fisheries, their Groundfish Observer Program, and USFWS are actively communicating with each other in response to this incident, and are coordinating efforts to minimize the risk of further bycatch. NOAA–Fisheries is also working closely with the Pacific cod (*Gadus macrocephalus*) freezer longline fleet in which the bird was taken, to evaluate what additional actions can be taken by the fleet to avoid further problems. NOAA–Fisheries also is conducting outreach to all hook-and-line vessels in the BSAI and GOA, to remind them that they are required to employ multiple deterrents to minimize the risk of taking seabird. “Hook-and-line vessel operators should be alert to the presence of Short-tailed Albatrosses in this area and fish with all due caution to avoid further incidental take of this endangered species,” said Jim Balsiger, Alaska Regional Administrator for NOAA–Fisheries.

Another Short-tailed Albatross was killed in a different longline fishery off the coast of Oregon in April 2011, according to a report released by the Pacific Fisheries Management Council (PFMC) in September. It was the first incidental take of the species in the Pacific Northwest. NOAA–Fisheries initiated a new consultation with USFWS in response to this incident. Hook-and-line fisheries of both Alaska and Hawai’i are required to use bycatch deterrents (thanks in part to lobbying for these regulations by the fishing industry itself). However, the PFMC has relied on voluntary efforts by the fleet. The Fishing Vessel Owners Association, based in Seattle, has participated in research and development of deterrents for the Pacific Northwest, and is urging that the PFMC require their use. Further information is at <http://www.abcbirds.org/newsandreports/releases/110909.html>

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### USFWS DECLINES TO LIST BLACK-FOOTED ALBATROSS UNDER ESA

After six years of consultation, USFWS has determined that listing the Black-footed Albatross (*Phoebastria nigripes*) as endangered or threatened throughout its range is not warranted. The finding was published in the Federal Register on 6 October 2011. The agency’s review of the best scientific and commercial information available led them to conclude that a population decline in the Black-footed Albatross of a type that would merit listing under the ESA could not be demonstrated.

Although USFWS determined that the Hawaiian and Japanese populations of the species meet the criteria to be considered as Distinct Population Segments (DPS) under the ESA, they concluded that listing was not warranted for either breeding population. A DPS is a portion of a vertebrate species’ or subspecies’ range that is geographically discrete, and

that also is biologically or ecologically significant. The ESA allows USFWS to add individual populations of species that meet DPS criteria to the endangered species list, even if the overall population of the species across its range does not warrant protection under the act.

Loyal Mehroff of USFWS said, “Although at this time we believe the scientific information shows the Black-footed Albatross does not warrant listing as an endangered or threatened species, we encourage the public to continue to submit any new information concerning the status of or threats to the species. New information will help us monitor the status of the species and encourage conservation efforts.”

The review process began in October 2004, when USFWS received a petition requesting that the albatross be listed as a threatened or endangered species, and that critical habitat be designated concurrently. The petition was filed by the environmental law firm EarthJustice, on behalf of Turtle Islands Restoration Network and the Center for Biological Diversity. In October 2007, USFWS published its 90-day petition finding in the *Federal Register*, stating that the petition presented substantial information indicating that listing might be warranted, and a status review was initiated. In August 2009 USFWS reopened the period for collecting information, in response to the publication by the U.S. Geological Survey of “Status assessment of the Laysan and Black-Footed Albatrosses, North Pacific Ocean, 1923-2005.”

USFWS considered three options during the petition review: (1) listing the Black-footed Albatross throughout its range, (2) listing the Hawaiian breeding population of the Black-footed Albatross as a Distinct Population Segment (DPS), or (3) listing the Japanese breeding population of the Black-footed Albatross as a DPS. The agency evaluated the petition by examining five factors: (1) present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation;

## CONSERVATION REPORT

(4) inadequacy of existing regulatory mechanisms; and (5) other natural and manmade factors affecting its continued existence. Current threats that they evaluated include incidental mortality from longline fishing, ingestion of plastics, and contamination by mercury and by organochlorines such as PCBs and DDT. Rising sea levels and loss of habitat on low-lying oceanic islands due to climate change are a potential threat of uncertain magnitude and effect.

For further information contact Loyal Mehrhoff, Field Supervisor, Pacific Islands Fish and Wildlife Office, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, Room 3-122, Box 50088, Honolulu, Hawai'i 96850; telephone (808) 792-9400, fax (808) 792-9581.

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### USFWS REVISES MARBLED MURRELET CRITICAL HABITAT IN OREGON AND WASHINGTON

On 5 October 2011, the U.S. Fish and Wildlife Service (USFWS) announced a revision of critical habitat for the Marbled Murrelet (*Brachyramphus marmoratus*), a threatened species under the ESA. The revision removes approximately 189,671 acres (76,757 ha) of forest land in northern California and southern Oregon from the 3,887,800-acre (1,573,336 ha) 1996 critical habitat designation. Approximately 95% of the 1996 designation remains in place.

The rationale for revising the critical habitat comes from intensive surveys conducted by the USFWS since 1997, which have provided a more comprehensive understanding of the species' biological needs and the specific areas that are essential for its recovery. The areas removed were deemed not to be essential to the conservation of the species, and not to meet the definition of critical habitat. USFWS concluded that the habitat in these areas does not contain

elements of physical or biological features, in appropriate quantity and spatial arrangement, to make it essential for the conservation of the species.

Critical habitat is defined in the ESA as "geographic areas containing features essential for the conservation of a threatened or endangered species, and which may require special management considerations or protection". Designating land as critical habitat does not affect land ownership, establish a refuge or preserve, and has no impact on private landowners when they take actions on their land that do not require federal funding or permits.

USFWS is also finalizing their acceptance of the scientific name of the Marbled Murrelet, formerly *Brachyramphus m. marmoratus*, as *Brachyramphus marmoratus*. This reflects the change in taxonomy of the genus in 1998 that separated the North American and Asiatic Marbled Murrelets into separate species (the latter is now *Brachyramphus perdix*). The two were previously classified as subspecies (*B. m. marmoratus* and *B. m. perdix*, respectively).

The final rule, maps and descriptions of the areas proposed for critical habitat can be found in the *Federal Register* at <http://www.fws.gov/wafwo/> Contact for further information is Doug Zimmer, (360) 753-4370.

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### RADAR RIDGE WIND FARM PROPOSAL CANCELED DUE TO MARBLED MURRELET

On 17 November 2011, plans for the first major wind farm in Western Washington were canceled because of federal restrictions to protect the threatened Marbled Murrelet. Richland-based Energy Northwest and four southwest Washington utilities spent four years and more than \$4 million trying to put 32 wind turbines on Radar Ridge near Naselle. Energy Northwest says, "The U.S. Fish and Wildlife Service imposed untenable restrictions on the wind farm

because studies showed one bird could have been harmed every two years." The utilities' decision to terminate the Radar Ridge Wind Project was unanimous and was posted on the agency's website.

Termination of the Radar Ridge project illustrated the problems of trying to build a major energy facility in the critical habitat of a threatened species. Energy Northwest had tried to find ways to lessen the project's impacts on murrelets; however, in the end, none of the well-intentioned mitigation measures that were proposed could overcome the problems of a project that was simply in the wrong place. The direct environmental harm of the project, including impacts to Marbled Murrelets, would have far outweighed its benefits.

Radar Ridge is centrally located within an area known as the Nemah Block. A 2008 report commissioned by the state of Washington identified the Nemah Block as the single best place on state-managed lands to restore Marbled Murrelet habitat. As part of a 1997 Habitat Conservation Plan (HCP), which allows timber harvest on public lands in areas where threatened wildlife species could potentially be impacted, the Washington Department of Natural Resources (WDNR) committed to "make a significant contribution to maintaining and protecting marbled murrelet populations in western Washington over the life of the HCP." The report highlighted the pressing need for substantial habitat restoration on much of the state-managed lands, if the HCP's conservation objectives were to be achieved.

PSG wrote several letters about this wind farm, raising our concerns with its impacts on the Marbled Murrelet.

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### BI-NATIONAL SEABIRD RESTORATION EFFORT OFF BAJA CALIFORNIA

On 29 November 2011, the Montrose and Luckenbach Trustee Councils and the Government of Mexico announced a \$4 million dollar award to a

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US–Mexico partnership whose purpose is a five-year program to restore seabird populations on off the Pacific coast of Mexico. Improvement of nesting habitat on seven islands in Mexico will create more stable and viable populations of seabirds in both California and Baja California.

The target islands support a diverse group of breeding seabirds and are known for high levels of biological diversity. Seventeen species of seabirds breed on the islands, ten of which also breed on the Channel Islands of California. Most of the seabirds that nest in colonies of northwest Mexico are part of a larger population that breeds, forages, and disperses into California.

The partnership will begin work in January 2012 on Coronado, Todos Santos, San Martín, San Jerónimo, Natividad, Asunción, and San Roque Islands. Seabird species that will benefit include the California Brown Pelican (*Pelecanus occidentalis californicus*), Cassin's Auklet (*Ptychoramphus aleuticus*), Ashy Storm-Petrel (*Oceanodroma homochroa*), and Xantus's Murrelet (*Synthliboramphus hypoleucus*). These populations face threats such as non-native predators, nest and burrow destruction, and disturbance from lights and other man-made problems.

Restoration projects will use decoys, mirrors, and broadcast of calls to attract birds to the colonies, and will construct artificial nests to improve nesting opportunities. The partners will also conduct habitat restoration, reduce human disturbance and artificial lights, and support environmental education in surrounding communities.

The Montrose and *Luckenbach* Trustee Councils manage funds that were received in settlements from pollution releases, specifically DDT from the Montrose Chemical Corporation and oil from the SS *Jacob Luckenbach*. The trustees act on behalf of the public, under state and federal law, to recover funds and to direct projects that will support restoration of the natural resources injured by the contaminants. The trustees in these councils include USFWS, US National Park Service, NOAA,

California Department of Fish and Game, California State Lands Commission, and California Department of Parks and Recreation. The National Fish and Wildlife Foundation will provide administrative support for the program.

“The Trustee Councils are thrilled to support this partnership between leading conservation organizations in both Mexico and the US,” said Dan Ashe, Director of USFWS. “Seabirds cross freely over international boundaries and so must our restoration efforts. This bi-national project on the Baja California Pacific Islands will benefit seabird populations in both countries for years to come.”

The partnership that will implement the restoration program is comprised of the National Audubon Society, Cornell Laboratory of Ornithology, Grupo de Ecología y Conservación de Islas (GECI), and the Mexican Fund for the Conservation of Nature. This partnership will strengthen an ongoing conservation program conducted by GECI on the islands during the past 15 years.

Contacts are Jane Hendron, USFWS; Steve Hampton, CDFG; and Jennifer Boyce, NOAA.

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### AIRCRAFT CARRIERS AND HELICOPTERS TO THE RESCUE ON HENDERSON ISLAND

The first multi-island, multi-nation, multi-agency rat eradication voyage undertook the extermination of rats on Henderson Island in December 2011. The 27,000-mile voyage across the Pacific also included rat eradication projects on Palmyra Atoll and in the Phoenix Islands of Kiribati, which were conducted earlier in 2011 by other organizations. The £1.5 million (\$2.3 million) project on Henderson Island was coordinated by the Royal Society for the Protection of Birds (RSPB), a British nonprofit group that is similar to the Audubon Society in North America.

Henderson Island is an uninhabited forested atoll of 43 km<sup>2</sup> in the Pitcairn group of the south-central Pacific. It is one of the United Kingdom's most remote territories and a UNESCO World Heritage Site. The island had been ravaged by Pacific rats (*Rattus exulans*; formerly known as Polynesian rats) since they were introduced by settlers eight centuries ago. The rats were destroying the island's habitats, driving the endangered Henderson Petrel (*Pterodroma atrata*) towards extinction, and significantly damaging the populations of four other endemic bird species—Henderson Fruit-Dove (*Ptilinopus insularis*), Henderson Lorikeet (*Vini stephensi*), Henderson Reed-Warbler (*Acrocephalus taiti*), and Henderson Crake (*Porzana atra*). There was also concern for rare plants, insects, and snails. It is estimated that before rats were introduced there were millions of ground-nesting seabirds, but just 40,000 pairs remain today. Early results indicate that the seabird population will boom if the rats have been successfully removed.

Pre-eradication research included verifying that baits were not toxic to endemic snails, and holding 20 Henderson Crakes captive during the project to prevent their exposure to bait.

The eradication project involved a purpose-built “aircraft carrier” that was capable of handling two helicopters from its temporary flight deck. Poison rat pellets were dropped on the island from giant hoppers suspended beneath the helicopters. The bait drop aimed to deposit pellets every few feet across the entire island.

Although the RSPB will have to wait two years to be certain whether all the rats are gone, there are already encouraging signs that the island is returning to a natural state. Richard Cuthbert is an RSPB scientist with the project who spent three months on the island. He said, “The rats were eating an estimated 25,000 seabird chicks each year. . . . Before the eradication attempt, almost no Murphy's Petrel (*Pterodroma ultima*) chicks escaped rat predation. The latest surveys suggest that since the [bait] drop, over 85% of Murphy's Petrel chicks have

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gone on to fledge . . . Henderson Reed-Warbler has also responded extremely quickly, with . . . a five-fold increase since the bait drop.”

Final results of the eradication project will not be known until 2013, when rat surveyors revisit the island. However, the RSPB is extremely hopeful that the project has eradicated the rats from Henderson Island, since no previous

aerial operation to remove Pacific rats has failed.

Project partners and donors included the Pitcairn Islanders, United Kingdom government, David and Lucile Packard Foundation, the Critical Ecosystems Partnership Fund, BBC Wildlife Fund, and the Royal Zoological Society of Scotland. Individual support came from

Sir David Attenborough, seabird expert Peter Harrison, and generous donors.

More information can be found at <http://www.birdlife.org/community/2011/12/aircraft-carrier-and-helicopters-come-to-unique-islands-rescue/> [Editor's note: Contrary to a typo on the BirdLife website, the RSPB is a separate group from BirdLife International.]

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# PSG NEWS

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## LONG-RUNNING EXCO WILL CHANGE IN FEBRUARY

PSG's current Executive Council (see inside back cover for a full list of EXCO members) has been in office for 16 months, since 10 September 2010. That is because each EXCO serves from the end of one Annual Meeting until the end of the next one, as specified in PSG's Bylaws (see the article on "How EXCO works" in this issue). And PSG's most recent Annual Meeting coincided with the 2010 World Seabird Conference in Victoria, British Columbia.

The current EXCO has served for this heroic length of time because PSG had no annual meeting during 2011. That gap in meetings offset the two that were held in 2010 (at Long Beach, California in February, and in September). A newly elected EXCO took office at the end of the February 2010 meeting, as usual. But at the next Annual Meeting in Victoria (in September, only nine months later), it was replaced by the current EXCO members. Therefore the current EXCO will have served for more than 16 months.

With the upcoming Annual Meeting of February 2012 in Hawai'i, PSG will return to the more-or-less regular yearly schedule of meetings and EXCO successions. Elections for the new EXCO were not available as of press time for

this issue (22 January 2012), but will be announced at the meeting, on PSG's website, and in the Spring 2012 issue of *Pacific Seabirds*.

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## THIS IS A SPECIAL ISSUE OF PACIFIC SEABIRDS

*Pacific Seabirds* is trying something new with this issue. For one thing, there is a special section on how PSG functions: (1) how PSG works for its members "in the background" (including how we meet our financial needs); and (2) how the Executive Council works, including the obligations of its members as PSG's board of directors.

The second "new departure" is a double issue—Volume 38, Numbers 1 and 2. We hope this won't happen again for awhile; we're doing it in order to catch up, because the volume year of *Pacific Seabirds* has been lagging behind the calendar year. The Editor apologizes for the delays, and she will do her best to keep up to date in the future.

*Contributors*: please note that this means the Editor will try to give you plenty of notice regarding deadlines—but then she intends to enforce them! If your submission hasn't arrived by the deadline, it will have to wait until the next issue.

## NEW ASSOCIATE EDITOR OF PACIFIC SEABIRDS

Patricia Baird, PhD has agreed to assist the editor of *Pacific Seabirds*. This role was suggested by PSG Chair Pat Jodice, along with assistants to some of the Committee Coordinators, because of the heavy workload that all of us sometimes take on.

Pat has already proven herself a great assistant to the Editor, who thanks her sincerely! It's especially appreciated because of her in-depth knowledge of PSG and her long service as coordinator of the Elections Committee. That's in addition to her research and her position at Simon Fraser University.

The Editor continues to take final responsibility for the content of *Pacific Seabirds*, in particular all errors and omissions.

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## NEW ASSOCIATE EDITOR FOR CONSERVATION

Joanna Smith has agreed to compile the Conservation Report for Pacific Seabirds, starting with this issue. She is working closely with Craig Harrison, the Vice-Chair for Conservation, who has provided the report since 1993. Thank you to both!

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Some reports were not received in time for this issue and will appear in the near future. Work is generally reported in the region where it took place; if the researcher is based in a different region, the work is mentioned there briefly as well. For work in regions that are not reported in this issue, a full description of the work is published in the researcher's home region.

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## CANADA

Compiled by Ken Morgan

### WESTERN CANADA

**Louise Blight** (University of British Columbia [UBC], Vancouver, British Columbia [BC]) continued her PhD work with **Peter Arcese** (Centre for Applied Conservation Research, UBC) on long-term population trends of the Glaucous-winged Gull (*Larus glaucescens*). Louise is using stable isotope analysis and museum records to examine changes in gull diet and numbers over the last 150 years. Louise also is in the process of revising a draft Canadian Management Plan for the Black-footed Albatross (*Phoebastria nigripes*) (more details under the Short-tailed Albatross/Pink-footed Shearwater Recovery Team, later in this section).

**Mikaela Davis** (Simon Fraser University [SFU], Burnaby, BC) is studying spatial and temporal dietary trends of Glaucous-winged Gulls at colonies along the BC coast. The project incorporates both conventional dietary sampling and stable isotope analysis. Mikaela has completed the fieldwork and is now in the data-analysis phase. Upon completion, her results will be used to interpret contaminant-monitoring data collected by Mikaela, **John Elliott** (Environment Canada [EC], Delta, BC), and others.

**Alan Burger** (University of Victoria [UVic], Victoria, BC) continues research on Marbled Murrelets (*Brachyramphus marmoratus*) in BC. Alan is revising the status review of the Marbled Murrelet in Canada for the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). As well, Alan continues to work with **Louise Waterhouse** (BC Ministry of Forests, Lands, and Natural

Resource Operations [MFLNR], Nanaimo, BC) and **Alvin Cober** (BC Ministry of Environment (BCMOE), Queen Charlotte City, BC) on the application of helicopter habitat surveys for land-use planning in Haida Gwaii, BC.

**Monica Mather** (MFLNR, Nanaimo, BC) is working on Marbled Murrelet nesting habitat mapping and habitat losses in BC. A recent publication by Monica is: Mather, M., T. Chatwin, J. Cragg, L. Sinclair, and D.F. Bertram, 2010. Marbled Murrelet nesting habitat suitability model for the British Columbia Coast. *BC Journal of Ecosystems and Management* 11(1&2):91–102 (<http://journals.sfu.ca/forrex/index.php/jem/article/viewFile/11/27>).

**Jenna Cragg** (UVic) conducted radar surveys for Marbled and Kittlitz's (*Brachyramphus brevirostris*) murrelets on Kodiak Island (AK) for her MSc project. She was assisted by **Alan Burger** (UVic), Kodiak National Wildlife Refuge biologist **Robin Corcoran** (USFWS), and **John Piatt** of the U.S. Geological Survey (USGS), Anchorage, AK. Jenna is developing radar monitoring protocols for *Brachyramphus* murrelets in Alaska.

**Harry Carter** (Carter Biological Consulting, Victoria, BC) continued working on several projects in BC: historical alcid breeding summaries, with **Spencer Sealy** (University of Manitoba, Winnipeg, Manitoba [MB]); Pelagic Cormorant (*Phalacrocorax pelagicus*) surveys in the Strait of Georgia, BC, with **Trudy Chatwin** (BCMOE, Nanaimo, BC); and seabird restoration planning at Seabird Rocks, Barkley Sound, BC, with **Peter Clarkson** and **Yuri Zharikov** (Pacific Rim National Park and Reserve, Ucluelet, BC). Harry reports that he and

coauthors have recently published several papers: (1) Carter, H.R., and S.G. Sealy, 2008. Ancient Murrelets breeding at Triangle Island, British Columbia, in 1949. *Wildlife Afield* 6:201-211. (2) Carter, H.R., and S.G. Sealy, 2010. Re-evaluation of the first three Marbled Murrelet nests reported in British Columbia. *Northwestern Naturalist* 91:1-12. (3) Carter, H.R., and S.G. Sealy, 2011. Historical breeding records of four alcids in British Columbia and southeastern Alaska, 1858-1910. *Northwestern Naturalist* 92:37-49.

**Dan Esler** (Centre for Wildlife Ecology, SFU [CWE]) reported that, along with his students and collaborators, he continues to evaluate sea duck ecology throughout the annual cycle. Projects include:

(1) Evaluations of energetic, nutritional, or demographic constraints imposed during the remigial molt stage in several states and provinces. Surf Scoters (*Melanitta perspicillata*) and White-winged Scoters (*M. fusca*) were studied in Washington (WA), BC, and Alaska (AK), with students **Rian Dickson** and **Brian Uher-Koch**, researchers **Eric Anderson** and **Jenn Barrett** (CWE), and collaborators **Jerry Hupp** (Alaska Science Center, USGS, Anchorage, AK) and **Joe Evenson** (Washington Department of Fish and Wildlife [WDFW], Olympia, WA). Barrow's Goldeneyes (*Bucephala islandica*) were studied in Alberta (AB) by student **Danica Hogan** (CWE), in collaboration with **Jonathon Thompson** (Ducks Unlimited, Canada, at Edmonton, AB) and **Sean Boyd** (EC, Delta, BC).

(2) Delineation of population structure, migratory connectivity, and site

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fidelity throughout the annual cycle in Surf Scoters. Co-collaborators included **David Ward** and **Jerry Hupp** (Alaska Science Center), **John Takekawa** and **Susan de la Cruz** (Western Ecological Research Center, USGS, Vallejo, California [CA]), **Joe Evenson** and **Dave Nyeswander** (WDFW, Olympia, WA), and **Sean Boyd**. Similar evaluations were done for Barrow's Goldeneyes, with collaborators **Jonathon Thompson**, **Sean Boyd**, **Tim Bowman** (Migratory Bird Management, U.S. Fish and Wildlife Service [USFWS], Anchorage, AK), **Malcolm McAdie** (BCMOE, Nanaimo, BC), and the Pacific Wildlife Foundation (<http://www.pwlf.org/index.htm>).

(3) Latitudinal variation in wintering ecology of Surf Scoters from Mexico to Alaska, with students **Corey VanStratt** and **Brian Uher-Koch**, researcher **Kathy Brodhead** (CWE), and collaborators **David Ward**, **Jerry Hupp**, and **Sean Boyd**.

(4) Consideration of the effects of offshore wind farm development on habitat quality for White-winged Scoters and Long-tailed Ducks (*Clangula hyemalis*), with student **Eric Palm**, researcher **Eric Anderson**, and collaborators **Sean Boyd** and Nai Kun Wind Energy Ltd.

**Tony Gaston** (EC, Ottawa, Ontario [ON]) and **Sarah Wallace** (Queen's University, Kingston, ON) visited Reef Island, Haida Gwaii, in early May. Although they had heard that there had been a major blow-down of trees in the colony area, they were not prepared for total devastation that greeted them. In the main study area, few trees were left standing; most of the nearly 100 seabird nest boxes were destroyed or displaced; and the field cabin and cookhouse were flattened, forcing Tony and Sarah to camp under a tarpaulin. They anticipate that the Ancient Murrelet (*Synthliboramphus antiquus*) colony area will be rapidly blocked by dense regeneration of saplings, making it unsuitable for nesting.

Tony and Sarah joined **Dan Shervill** and **Megan Harrison** (Canadian Wildlife Service [CWS], Delta, BC) for a survey of burrow-nesting auks at Englefield

Bay (on the west coast of Haida Gwaii). They carried out censuses on Helgeson, Little Helgeson, Lihou and Carswell islands. The Ancient Murrelet population of islands they visited appeared to have diminished from approximately 15,000 breeding pairs (1986) to a little over 3,000 pairs (2011). This comes on top of the disappearance of Ancient Murrelets from Saunders Island, where several thousand pairs apparently nested at some time prior to 1986. The survey could not assess the status of the other burrow-nesting auks in the area, but no recovery was apparent in numbers of Rhinoceros Auklets (*Cerorhinca monocerata*) and Cassin's Auklets (*Ptychoramphus aleuticus*) affected by raccoon (*Procyon lotor*) predation in the 1990s. Conversely, the status of storm-petrels, probably mainly Fork-tailed Storm-Petrels (*Oceanodroma furcata*), on Little Helgeson and Lihou islands appeared unchanged since 1986. Additional surveys need to be undertaken to assess the status of major Ancient Murrelet colonies on the west coast of Haida Gwaii.

Tony also reported that the Laskeek Bay Conservation Society (LBCS) field camp at East Limestone Island, 6 km from Reef Island, was affected by the blow-down that devastated Reef; but their cabins were spared, and a portion of the forest occupied by Ancient Murrelets was left standing. The LBCS ran their usual seabird and marine mammal monitoring program, led by **Jake Pattison** and **Ainsley Harrison** (both from Haida Gwaii). Numbers of Ancient Murrelets continued to decrease as they have been doing since 2000, but numbers of Cassin's Auklets and Pigeon Guillemots (*Cepphus columba*) in nest boxes both increased sharply this year, and breeding success appeared to be good. Numbers of Marbled Murrelets observed on at-sea transects were higher than in recent years. This year was the 22nd year of the LBCS's operations. Tony and Sarah visited Laskeek Bay, where Sarah collected blood samples from Cassin's Auklets for a phylogeographic study of the species.

**Luke Halpin** continued to work on automated acoustic monitoring of

nocturnal seabirds (Ancient Murrelets, Leach's Storm-petrels [*Oceanodroma leucorhoa*], Fork-tailed Storm-petrels, and Cassin's Auklets) on various islands that are undergoing rat eradication in Gwaii Haanas National Park Reserve and in Haida Heritage Site (Haida Gwaii, BC). Luke is working towards his Masters Degree in Resource and Environmental Management at SFU.

**Anne Harfenist** (Harfenist Environmental Consulting, Smithers, BC) and **John Kelson** (contractor, Smithers, BC) conducted at-sea surveys for bird species abundance and behavior along transects and also in proximity to gillnet fishing vessels at the mouth of the Skeena River during the gillnet fishery for sockeye salmon (*Oncorhynchus nerka*). **Laurie Wilson** (CWS, Delta, BC), **Karen Barry**, and **Christopher Di Corrado** (Bird Studies Canada, Delta, BC) conducted similar surveys in northern Johnstone Strait during the gillnet fisheries for sockeye and chum (*O. keta*) salmon. Data will be used by the CWS to assist in determining how, when, and where gillnet fishing may impact local seabirds, and for identifying potential ways to mitigate impacts.

**Mark Hipfner** (CWE and EC) reported that summer 2011 marked the 18<sup>th</sup> year of operation of the CWE's seabird research and monitoring program on Triangle Island, BC. The 2011 field crew consisted of Hipfner, **Allison Henderson** (PhD candidate, University of Saskatchewan [U of S], Saskatoon, Saskatchewan [SK]), **Greg Jones** and **Saul Schneider** (CWS, Delta, BC), **Amy-Lee Kouwenberg** (PhD candidate, Memorial University of Newfoundland [MUN], St. John's, Newfoundland and Labrador (NL)), **Jim Lamont** (volunteer), **Herbert Prins** (Wageningen University and Research Centre, Wageningen, The Netherlands), **Ron Ydenberg** (CWE), and **Ernesto** the elephant seal (of no fixed address). The crew monitored timing, success of breeding, and a suite of related ecological and demographic parameters in Cassin's Auklet, Rhinoceros Auklet, Black Oystercatcher (*Haematopus bachmani*), and Glaucous-winged Gull. Productivity was

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normal for a cold-water year in Cassin's Auklets and Black Oystercatchers, but because the spring phytoplankton bloom was late in 2011, Rhinoceros Auklets suffered a poor breeding season.

The CWS also continued their seabird monitoring program elsewhere in BC. **Moira Lemon** (CWS, Delta, BC) and **Mark Hipfner** led field crews consisting of **Mark Drever**, **Dan Shervill**, and **Courtney Albert** (all of CWS, Delta, BC), as well as **Glen Keddie** (CWS contractor) in resurveys of the Rhinoceros Auklet colonies on Pine Island (BC central coast), Lucy Island (BC north coast) and SGang Gwaay (Haida Gwaii, BC). The crews also banded adult Rhinoceros Auklets as part of an ongoing demographic study on the population-level impacts of fisheries by-catch. They collected blood and feather samples for analysis of corticosterone levels and stable isotopes as part of **Kouwenberg's** PhD thesis (described in previous paragraph); collected whole salmon (*Oncorhynchus* spp.) smolts from birds that were provisioning chicks, as part of a pilot project to quantify predation by seabirds on Fraser River sockeye salmon; and collected sandlance (*Ammodytes hexapterus*) stomachs for analysis of geographic variation in diet in this important forage fish.

**Ken Morgan** (CWS, Sidney, BC) continued to monitor seabirds in the western Arctic with a cruise conducted by **Michael Bentley** (CWS contractor, Victoria, BC) (see Arctic Canada, below). Ken also continued collaborating with others on a variety of projects including oil-spill planning, seabird by-catch assessment, marine protected area planning, and identification of marine Important Bird Areas.

Ken also continued as the chair of Canada's Short-tailed Albatross (*Phoebastria albatrus*) / Pink-footed Shearwater (*Puffinus creatopus*) Recovery Team. The Recovery Team also has taken on the role of developing a Management Plan for the Black-footed Albatross (*Phoebastria nigripes*), with **Louise Blight** (UBC and Procellaria Research and Consulting, Vancouver, BC)

being the lead author. The Black-footed Albatross is listed as "Special Concern" under Canada's Species At Risk Act. The team, now (unofficially) referring to itself as the Canadian Albatross and Shearwater Recovery Team, consists of **Heather Brekke** (Fisheries and Oceans Canada, Vancouver, BC), **Peter Hodum** (University of Puget Sound and Oikonos-Ecosystem Knowledge, Seattle, WA), **Nadine Parker** (EC, Vancouver, BC), **Danielle Smith** (Canadian Department of National Defence, Victoria, BC), **Joanna Smith** (Birdsmith Ecological Research, Chilliwack, BC), and **Ross Vennesland** (Parks Canada, Vancouver, BC), as well as Louise and Ken.

**Ken Morgan**, **Cynthia Pekarik** (CWS, Gatineau, Québec [QC]), **Erin Hagen** (Island Conservation, Santiago, Chile), **Jessica Hardesty Norris** (American Bird Conservation, The Plains, Virginia), **Peter Hodum** (Oikonos-Ecosystem Knowledge, Seattle, WA) and numerous Chilean government and non-government employees and academics traveled to Isla Mocha, Chile to participate in a 2-day workshop with Mocha residents. The attendees discussed conservation issues impacting Pink-footed Shearwaters and possible solutions. The highlight of the trip was visiting the shearwater colony in the late evening and witnessing birds returning to their burrows.

In August, Ken also participated as an observer in the meeting of the Agreement on the Conservation of Albatrosses and Petrels Advisory Committee and associated workshops in Guayaquil, Ecuador.

**Jennifer Provencher** (PhD candidate, Carleton University, Ottawa, ON) assisted **Joel Heath** (UBC, Vancouver, BC) teach the Marine Birds course at the Bamfield Marine Science Centre (west coast of Vancouver Island, BC) in June and July. Class projects included repeating at-sea bird surveys done by **Alan Burger** in the 1990s, the dissection of a Sooty Shearwater (*Puffinus griseus*), and an examination of the plastic debris found in its stomach. Other student projects included observing at-sea behavior

of Marbled Murrelets, disturbance of Pelagic Cormorants, and patterns in Black Oystercatcher behavior.

**Jo Smith** reported that she left The Nature Conservancy (Seattle, WA) in May and returned to BC to work with the Pacific North Coast Integrated Management Area Initiative. In her position as Science Coordinator, she directs all science and technical efforts for a marine planning partnership between the province of British Columbia and First Nations on the North Coast. The partnership uses an ecosystem-based management framework to address issues that include spatial conflicts between marine users and cumulative ecosystem effects.

While Jo was still at The Nature Conservancy in Seattle, WA, she worked with federal and state agencies, treaty tribes and coastal communities in WA to advance coastal and marine spatial planning (see regional report for Washington and Oregon). She also assisted **Anna Weinstein** (Audubon California, Emeryville, CA) with marine Important Bird Area designations on the west coast of the US.

**Pat Baird** (SFU) reported that she mentored students in Panama, Mexico, and California (CA), teaching them various field methods including mist-netting, banding, drawing blood, radio-tagging, conducting at-sea surveys, identifying food samples, and monitoring of foraging. The birds used for these projects were California Least Terns (*Sternula antillarum*) and Western Sandpipers (*Calidris mauri*). She also mentored graduate students at SFU and California State University (Long Beach and Fullerton, CA). Pat collaborated with scientists from Occidental College (Los Angeles, CA) in an ecological assessment of San Diego Bay, CA.

Pat also noted that she is the book editor for *Marine Ornithology*, so if you have any books that you would like to read on any aspect of ecology, marine biology and science in general, or on seabirds or shorebirds, please let her know (kahiltna@gmail.com). As well, Pat is the PSG Elections Chair; if you have an interest in running for office

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or you know someone who might be a good candidate for a position on the PSG Executive Council, please let her know.

**Michael Force** (private contractor) reported that he spent 298 days at sea conducting pelagic bird and marine mammal surveys in the Hawaii Exclusive Economic Zone (EEZ) for **Lisa Ballance** (Protected Resources Division, Southwest Fisheries Science Center [SWFSC], La Jolla, CA); off the South Shetland Islands, Antarctica, for **George Watters** (Antarctic Ecosystem Research Group, SWFSC); and in the northwest Atlantic Ocean, for **Debra Palka** (Protected Species Branch, Northeast Fisheries Science Center, Woods Hole, Massachusetts).

### CENTRAL AND EASTERN CANADA

**Alex Bond** wrote that he is in a Post-doctoral Fellowship position at U of S, where he has begun a study of the harvest of murre (*Uria spp.*), with field work on Gull and Cabot Islands, NL. Collaborators are from the Circumpolar Seabird Group throughout the North Atlantic. Early spawning by capelin (*Mallotus villosus*) meant a great year for murre chicks.

**Tony Diamond** (University of New Brunswick [UNB], Fredericton, New Brunswick [NB]) reports on work in summer 2011 by the Atlantic Laboratory for Avian Research (ALAR; formerly the Atlantic Cooperative Wildlife Ecology Research Network, at UNB). ALAR continued long-term research and monitoring at the seabird colony on Machias Seal Island (MSI) in the Bay of Fundy, NB. A census of occupied Atlantic Puffin (*Fratercula arctica*) burrows indicated about 6500 breeding pairs this season. **Kevin Kelly's** MSc research on physiological indicators of condition in puffins continued, in collaboration with **Becky Holberton** (University of Maine, Orono, Maine). Herring (*Clupea harengus*), the highest-energy diet item, was again scarce in the diet of both puffins and Razorbills (*Alca torda*); juvenile haddock (*Melanogrammus aeglefinus*) showed up in auk diets for the first time. Chick growth was the lowest recorded in Razorbills, and the third lowest in

Puffins. Arctic and Common Terns (*Sterna paradisaea* and *S. hirundo*) again nested sporadically but abandoned their nests by the end of June, as they have done each year since 2006.

Herring Gull (*Larus argentatus*) nests have increased sharply around MSI in recent years, as has bold predatory behavior. In an effort to reduce predation on other birds, the team destroyed 53 nests on Gull Rock (near MSI) and eight on MSI itself.

Forty-six adult puffins were swabbed for Avian Influenza Virus testing. **Kirsten Bowser's** project on the role of herring in the seabird food web has been modified to take advantage of advances in next-generation sequencing, which should allow her to obtain a more comprehensive view of both herring and seabird diet. **Erin Whidden** has started a project on factors affecting puffin fledging and recruitment. **Lauren Scopel** is expected to start more detailed research in January on the fate of Arctic Terns that abandoned MSI in 2006 and spread widely into the Gulf of Maine metapopulation.

Tony also reports that **Sarah Trefry** (ALAR) is approaching her last field season on Magnificent Frigatebirds (*Fregata magnificens*) in the Caribbean (see regional report for the Non-Pacific US and northwest Atlantic).

**Laura McFarlane Tranquilla** (PhD student, MUN, St. John's, NL) submitted this year's update of long-term seabird research by a team of students and fellows who are directed by **William Montevecchi**, Research Professor, MUN. The group is working on seabird colonies around NL, including Funk, Baccalieu, Gull, and Gannet Islands and at Cape St. Mary's, and at colonies in the Falkland Islands. **Chantelle Burke** (PhD student, MUN) retrieved eight tracking devices with pressure sensors on adult Common Murres (*Uria aalge*); she deployed 12 more devices. At Gull and Funk Islands, she is investigating sex differences in fall migration patterns, comparing males with chicks vs. independent females, and seasonal foraging behavior in relation to environmental cues that may be related

to prey availability. **Paul Regular** (PhD student, MUN) completed fieldwork on the foraging behavior of chick-rearing Common Murres, recovering five GPS loggers on Gull Island. **Laura McFarlane Tranquilla** completed fieldwork this summer on the Gannet Islands, retrieving 19 GLS loggers from Common and Thick-billed (*U. lomvia*) Murres, toward her study on wintering areas and habitat associations of these species. **April Hedd** (Adjunct Professor, MUN) completed her eighth season of a study of Leach's Storm-Petrel population and foraging ecology on Gull Island, and recovered GLS loggers from ten Common Murres on Funk Island, thus retrieving multiple years of data on movements. April published the research group's first paper on the winter movement ecology of Common Murres, and a second paper on migration and winter movements of Sooty Shearwaters (*Puffinus griseus*) from the Falkland Islands. In collaboration with **Al Baylis** (Falklands Conservation, Stanley, Falkland Islands), April is also studying winter movements of Black-browed Albatrosses (*Thalassarche melanophrys*) nesting on Steeple Jason Island in the Falklands.

Also during summer 2011, **William Montevecchi** retrieved tracking devices from breeding Northern Gannets at Baccalieu (n=2) and Funk Islands (n=9). Devices from 2010 tracked breeding Gannets from these islands, and also recently fledged juveniles from Cape St. Mary's and Funk Islands, along the eastern seaboard of the US, with some going to the Gulf of Mexico. **Dave Fifield** (MUN) completed his MSc on migration and wintering areas of Northern Gannets (*Morus bassanus*) from North American colonies, in collaboration with **Stefan Garthe** (University of Kiel, Germany).

**Alejandro Buren** (PhD student, MUN), as part of his study of the dynamics of capelin, cod (*Gadus morhua*), and harp seals (*Pagophilus groenlandicus*), found evidence of bottom-up regulation in the Newfoundland and Labrador Shelf ecosystem. **Emily Wilson** (MSc student, MUN/Canadian Healthy Oceans Network) completed ship-based seabird

surveys, including mid-winter trans-Atlantic crossings, toward her research on marine seabird communities and foraging areas.

**Samantha Richman** has been working as a post-doc at the Université du Québec à Rimouski (UQAR), Rimouski, QC, continuing her work with captive sea ducks at the Maurice Lamontagne Institute (Fisheries and Oceans Canada, Mont-Joli, QC). In collaboration with **Magella Guillemette** (UQAR) and **Sveinn Are Hanssen** (Norwegian Institute for Nature Research, Tromsø, Norway), they are developing conservation-friendly and cost-effective solutions to reduce sea duck predation on mussel aquaculture. In addition, Samantha and **Elisabeth Varennes** (PhD student, UQAR) are studying foraging energetics and prey-size selection for captive Common Eiders (*Somateria mollissima*) feeding on mussels, and **Anouck Viain** (PhD student, UQAR) is examining molting physiology, chronology, and growth rates on her captive flock of imprinted eiders.

**Rob Ronconi** (Acadia University, Wolfville, Nova Scotia [NS]) reported that he has initiated a project studying the gulls of Sable Island, NS, with **Phil Taylor** (Acadia University). The study is using telemetry and other technologies to monitor bird interactions with offshore oil and gas platforms on the Scotian Shelf. Along with collaborators at the Grand Manan Whale and Seabird Research Station (Grand Manan Island, NB), Rob conducted his 7th season of banding and sampling Great Shearwaters (*Puffinus gravis*) in the lower Bay of Fundy (NB). **Rob** and **Marty Leonard** (Dalhousie University, Halifax, NS) co-supervised Dalhousie honours student **Rolanda Steenweg**, who completed her thesis on dietary partitioning between Herring and Great Black-backed (*Larus marinus*) Gulls (in press, *Condor*).

#### ARCTIC CANADA

**Kyle Elliott** (PhD candidate, University of Manitoba, Winnipeg, MB), and **Tony Gaston** (EC, Ottawa, ON) visited Coats Island, Nunavut (NU) to

study Thick-billed Murres and Glaucous Gulls (*Larus hyperboreus*). Extremely warm weather made things unpleasant for researchers and seabirds alike as the high number of mosquitoes caused nest abandonment and mortality in murres. Early sea-ice retreat this year may have been associated with the numerous polar bears (*Ursus maritimus*) around the colony; they consumed many eggs, chicks, and adult birds. Regular ongoing monitoring (breeding success, counts, feeding watches) was supplemented with measurements of metabolism, blood sampling for hormones, and measurements of immunocompetence. In conjunction with **Yan Ropert-Coudert** (Centre National de Recherches Scientifiques, Strasbourg, France), the camp was able to deploy GPS loggers, accelerometers, and time-depth recorders to examine foraging behavior.

**Ken Morgan** (CWS, Sidney, BC) continued to monitor seabirds in the western Arctic, with a single cruise from Victoria (BC) to Kugluktuk, NU, conducted by **Michael Bentley** (CWS contractor, Victoria, BC).

**Jennifer Provencher** (PhD candidate, Carleton University, Ottawa, ON) wrote that along with **Jane Harms** (U of S, Saskatoon, SK), **Sam Iverson** (Carleton University) and **Mark Travers** (contractor with EC), she visited the communities of Cape Dorset and Coral Harbour, NU, during the spring duck and goose hunt in May. Snow Geese (*Chen caerulescens*), and Common and King (*Somateria spectabilis*) Eiders were collected in collaboration with the local hunter and trapper organizations. Many of the birds were dissected in the communities, including several used in demonstrations at the local school. Birds will also be dissected in collaboration with the Arctic College in Iqaluit, NU. All tissues collected will be used for PhD research by Jane (pathology and epidemiology of avian cholera in eiders), Sam (harvest and disease perturbations in waterfowl populations), and Jennifer (arctic marine bird parasites and multiple stressors).

## WASHINGTON AND OREGON

Compiled by Don Lyons

### COLONIES, BREEDING SURVEYS, AND NESTING HABITATS

**Scott Pearson, Tom Good, and Peter Hodum** continued their multi-year comparative study of reproductive success of Rhinoceros Auklets (*Cerorhinca monocerata*) on Protection and Destruction Islands, Washington (WA). Their work on the two islands was in its sixth and fourth year, respectively. Unlike in the previous three years, diet data were not collected during the 2011 season. Results have not yet been analyzed, but it appears that burrow occupancy by breeding pairs was lower in 2011 than in previous years, especially on Destruction Island. In addition, Tom Good coordinated preliminary contaminants analyses on multiple seabird species, primarily alcids, and on Rhinoceros Auklet prey species—sandlance (*Ammodytes hexaptera*), surf smelt (*Hypomesus pretiosus*), herring (Clupeidae), and anchovy (Engraulidae).

**Lee Robinson's** work with Pigeon Guillemots (*Cephus columba*) continued for the 17th straight season on Protection Island National Wildlife Refuge, although with a different focus this season. We looked at breeding success in nests located in drift logs, burrows, and native grass clumps, as well as 15 of her artificial nest boxes. The oldest Pigeon Guillemot on record with the Bird Banding Lab ("Double Yellow") returned again this season (its 15th), nested again in its same nest box, and successfully fledged a single chick.

**Shawn Stephensen, David Ledig, Erin Kunisch, Bill Bridgeland, Barbara Taylor, and Coty Krebs**, of the Oregon Coast National Wildlife Refuge Complex (OCNWR), conducted a study that documented the effects of the Independence Day fireworks display on seabird colonies at Depoe Bay and Bandon, Oregon (OR). The study period was from 1 June to 2 September 2011, with a core monitoring period from 27 June to 9 July. Monitoring was focused on

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populations of surface-nesting seabirds at the Pirate Cove colony and Coquille Point colony complex, particularly the Common Murre (*Uria aalge*), Brandt's Cormorant (*Phalacrocorax penicillatus*), Pelagic Cormorant (*P. pelagicus*), Western Gull (*Larus occidentalis*), and Black Oystercatcher (*Haematopus bachmani*). We examined the responses and effects on reproductive success from the large-scale community fireworks display. Surveys included four daily bird counts and behavioral observations of all seabird species, and monitoring of visible nests of Brandt's and Pelagic Cormorants, Western Gulls, and Black Oystercatchers from two mainland observation points. Aerial photographic surveys of the colonies were conducted on eight occasions with a helicopter or fixed-wing aircraft to document numbers of nests and relative nest success for the entire colony. Photographs were taken from the mainland vantage points at the same time and location each day to document seabird distribution, densities, and behavior. Video and still-frame photos were taken with infrared camera equipment to examine bird behavior prior to and during the fireworks display. In addition, a sound-level meter was used to document decibel levels of the fireworks reports. We have not completed 2011 data analysis; however, during the study period, 189 Brandt's Cormorant nests were documented at Pirate Cove colony; of these, nine (4.8% of the total) were abandoned after the fireworks display. Nest abandonment was not noted at the Coquille Point colony.

**Michael Brownlee** and **Shawn Stephensen** (OCNWR) conducted a population status assessment of Tufted Puffins (*Fratercula cirrhata*) at Haystack Rock, Cannon Beach, which is in the OCNWR. The project also included a pilot study to evaluate the feasibility of monitoring additional reproductive parameters at the island, such as breeding phenology and data collection success from shore-based vantage points. A precise breeding population estimate was obtained by determining total numbers of puffins attempting to nest, based on

the number of active burrow sites used during an intensive census period in early spring, when puffins are most visible. In 2010, we documented 122 breeding individual birds, 58% breeding success, and 377 burrows or potential nest sites at Haystack Rock. We have not completed 2011 data analysis; however, initial data review indicates that puffin numbers are slightly depressed compared to last year, and fewer birds appeared to have nested. We also documented many negative interactions with gulls (*Larus* spp.) and disturbances by Bald Eagles (*Haliaeetus leucocephalus*), as well as interesting social behaviors between puffins.

**Shawn Stephensen** and **David Ledig** (OCNWR) conducted an aerial seabird colony survey on June 9-10, 2011 that extended along the entire Oregon coast. The aircraft used was a Bell Jet Ranger III helicopter operated by **Trevor Walker** of Northwest Helicopters (Olympia, WA). Total flight time was approximately 10 hours. All cliff-nesting seabird colonies were photographed using digital cameras; birds were counted on the digital images utilizing GIS computer software. Thousands of digital images were organized and archived for future reference. Colony attendance by murres was slightly depressed in comparison to previous years; however, murres returned to nest at several historical colony sites that had not been attended for the last ten years.

**Shawn Stephensen** also conducted a coastal aerial survey of California Brown Pelicans (*Pelecanus occidentalis californicus*) on 15-16 September 2011. A total of 17,495 individual birds were counted in 2011, in comparison to 18,769 in 2007, 12,425 in 2008, 17,926 in 2009, and 12,313 in 2010. The survey extent was from Smith River, Del Norte County, northern California (CA) to Tunnel Island, Grays Harbor County, central WA. We included all rocks, reefs, islands, coastal beaches, and waters up to 0.5 mile offshore. Survey altitude ranged from 200 to 800 feet. The aircraft used was a fixed-wing Cessna 185 operated by commercial pilot/owner **Jack Christopherson** of Wilderness Air Charters, Inc.

**Deborah Jaques** (Pacific Eco Logic) conducted a pelican survey of East Sand Island, in the Columbia River estuary, by boat on the same day we conducted the aerial survey. Jaques estimated a total of 12,887 pelicans, which was incorporated into the overall total. East Sand Island continues to be the site of the largest congregation of pelicans during the summer on the Oregon coast.

**Shawn Stephensen, David Ledig, Madeleine Vander Heyden, Amanda Gladics, Jason Ziegler, and Coty Krebs** (OCNWR) conducted a census of Leach's Storm-Petrels (*Oceanodroma leucorhoa*) on Goat Island, within the OCNWR. A precise population estimate was obtained by determining burrow density, burrow occupancy, and nesting area, calculated with the aid of Light Detecting and Ranging (LIDAR) images. Transects with multiple 1x1 m quadrats were delineated on the island, in order that data can be compared among years. The 2011 estimated breeding population of Leach's Storm-Petrels at Goat Island was over 300,000 individuals.

**Rob Suryan, Amanda Gladics, Cheryl Horton, Alex Gulick** (all of Oregon State University [OSU]) and **Laura Filliger** (National Science Foundation intern) conducted studies of Common Murres at the Yaquina Head colony in Newport, OR. This is the fifth consecutive year of collaborative studies among OSU, U.S. Fish and Wildlife Service (USFWS), and the Bureau of Land Management (BLM) at this site. Reproductive success (fledglings per eggs laid) for murres in 2011 (0.22) was greatly reduced compared to the previous four years (0.54–0.77). As in 2010, hatching phenology in 211 was 2 weeks later than in previous years. The most striking difference in diets this year was an increase in flatfishes (*Pleuronectidae*). While murres may have experienced suboptimal foraging conditions at times during 2011, the greatest reproductive loss can be attributed to increased Bald Eagle disturbance. Disturbance by eagles tends to be concentrated in specific areas of the colony and declines in mid-June (late incubation), lessening the impact

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on overall murre reproductive output. However, this year eagle disturbances continued through the nesting season, were more widespread throughout the colony, and much more frequent. In 2011, we witnessed a disturbance every 2 hours, compared to frequencies in previous years of one event every 5–11 hours. While eagles caused the majority of disturbances, the number of other predators, which cause the greatest amount of egg and chick loss, also increased in 2011. These species included Western Gulls, Common Ravens (*Corvus corax*), Brown Pelicans, and Turkey Vultures (*Cathartes aura*). Brown pelicans and Turkey Vultures, in particular, were more disruptive of murre breeding than in previous years.

**Jan Hodder**, Oregon Institute of Marine Biology (OIMB), noted that the OIMB Pelagic Cormorant colony did not attempt to nest this year, with the exception of four nests that cormorants began building in late May but abandoned within days.

**Peter** and **Michelle Kappes** relocated to Corvallis, OR from the Université de la Réunion in March; Peter began working on a PhD with **Katie Dugger** at OSU, investigating the reproductive ecology and population dynamics of Adélie penguins (*Pygoscelis adeliae*). Michelle is now Courtesy Faculty in the Department of Fisheries and Wildlife at OSU, and is currently teaching and working to develop future seabird research projects.

The Oregon Department of Forestry (ODF) contracted with Turnstone Environmental Consultants to conduct surveys of Marbled Murrelets (*Brachyramphus marmoratus*) on state lands in the Coast Range of Oregon in 5 ODF districts (Astoria, Tillamook, Western Lane, Coos Bay, and West Oregon). Visiting a mixture of first, second and multi-year survey sites, surveyors conducted more than 1600 surveys at 202 unique sites and 995 unique stations. Murrelets were detected during 137 surveys and “occupied” behavior was observed during 31 surveys. All surveys were conducted according to the PSG’s 2003 protocol requirements. **Tom Williamson** was

the Turnstone project manager. District representatives for ODF were **Jenny Johnson** in Astoria, **Nick Stumpf** in Tillamook, **Jason Hazlett** in Western Lane, **Ryan Greco** in Coos Bay, **Dan McMinds** in West Oregon; **Matt Gostin** was the ODF contract administrator and primary contact.

Turnstone Environmental biologists also conducted Marbled Murrelet surveys for three landholders in the coast range of Oregon. These were pre-management surveys in support of proposed timber management areas. Biologists completed 210 surveys at 35 unique sites, resulting in 140 detections. **Jeff Reams** was the Turnstone project manager.

**Brian Cooper** and **Rich Blaha** of ABR, Inc. conducted the second year of a study funded by the U.S. Department of Agriculture, Forest Service (USFS) to determine Marbled Murrelet use of the drier habitats located east of the coastal redwood (*Sequoia sempervirens*) fog zone. The study area was in the Six Rivers National Forest (SRNF) in northern CA; summer 2011 was the second year of a two-year radar survey of 50 sites along the western boundary of the SRNF. The primary objective of the study is to use radar techniques to: (1) collect baseline information on locations, flight directions, and passage rates of murrelet targets flying into habitat east of the coastal fog belt; (2) help determine murrelet distribution and abundance in the SRNF.

**Kim Nelson**, of the Oregon Cooperative Fish and Wildlife Research Unit at OSU, continued her work on a cooperative project with BLM, USFS, USFWS, ODF, and Oregon Department of Fish and Wildlife (ODFW). She is developing a geo-spatial database for Marbled Murrelets in Oregon, based on existing data from forest surveys, nest sites, and locations where eggshells and grounded birds have been found. The database will be important for landscape planning, modeling murrelet habitat preferences, and minimizing disturbance to nesting.

**Blake Barbaree**, graduate student in the Fisheries and Wildlife Department at OSU, completed his thesis on “Nesting season ecology of Marbled

Murrelets at a remote mainland fjord in Southeast Alaska”. He was working with **Kim Nelson** (OSU) and **Scott Newman** (Food and Agriculture Organization) on a larger project studying the inland and at-sea ecology of Marbled Murrelets at Port Snettisham, Alaska.

**William Ritchie** continued to work with The Nature Conservancy (TNC) to design and implement forestry prescriptions and thinning strategies on forest lands managed by TNC in the Ellsworth Creek watershed, and by Willapa National Wildlife Refuge in forests adjacent to Willapa Bay in southwest WA. The aim is to enhance and restore suitable Marbled Murrelet nesting habitat on these lands. Treatment sites consist of small patches of legacy trees, and the goal is to enhance the forest surrounding these stands of older trees. Elsewhere, second-growth forests are being thinned to accelerate the onset of older forest conditions. Large-scale thinning of young plantation forests is also being undertaken.

Ritchie, as Coordinator of PSG’s Marbled Murrelet Technical Committee (MMTC), and many other MMTC members are involved in several ongoing conservation and survey related issues. These include conservation of the Marbled Murrelet population in the Santa Cruz Mountains, CA (Recovery Zone 6); development of a tree-climbing protocol; revisions to the Marbled Murrelet forest survey protocol; and participation in several USFWS recovery initiatives whose aim is to identify and prioritize research and conservation actions within the listed range of the murrelet.

**Martin Raphael** and **Tom Bloxton** continued collaborative studies on Marbled Murrelets and other seabirds in the Puget Sound area (WA) under the Northwest Forest Plan (NWFP) during 2011 (see “Pelagic studies,” below).

**Dan Roby** of OSU and the U.S. Geological Survey (USGS), with his research team from OSU, the Oregon Cooperative Fish and Wildlife Research Unit, Real Time Research (RTR), and co-operators continued to study interactions between seabirds and forage fish in the Pacific Northwest, particularly predation

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on juvenile salmonids (*Oncorhynchus* spp.) in the Columbia River basin. This included research on the largest known breeding colonies of Caspian Terns (*Hydroprogne caspia*) and Double-crested Cormorants (*Phalacrocorax auritus*) on the west coast, both on East Sand Island in the Columbia River estuary. They also worked on colonies of Caspian Terns, Double-crested Cormorants, American White Pelicans (*Pelecanus erythrorhynchos*), and several gull species elsewhere in the region.

In 2011, the size of the Caspian Tern colony on East Sand Island was approximately 7000 pairs, down from approximately 8300 pairs in 2010. For the first time since this colony was restored in 1999, terns experienced complete breeding failure at the site. The proximate cause of colony failure was late-evening disturbance by Bald Eagles, along with the associated depredation of tern eggs and chicks by Glaucous-winged/Western hybrid gulls (*Larus glaucescens* x *L. occidentalis*). Despite nest failure, most terns remained in the area during the breeding season and used East Sand Island as a night roost. Some terns that did leave the Columbia River Estuary attempted to nest at sites in coastal WA but also failed there.

The size of the Double-crested Cormorant colony on East Sand Island in 2011 was approximately 13,000 nesting pairs (compared to approximately 13,600 pairs in 2010). Eagles also disturbed the East Sand Island cormorant colony to a greater extent than in previous years, and the preliminary estimate of productivity (1.33 fledglings/pair) was lower than in recent years (1.92–2.80 fledglings/pair during 2006–2010).

East Sand Island continues to be the largest known post-breeding roost site for California Brown Pelicans. Over 14,200 Brown Pelicans were counted on the island in mid-August. The Brandt's Cormorant colony on East Sand Island continued to grow rapidly, with 1490 pairs nesting in 2011, up from 985 in 2010. Around 100 pairs of American White Pelicans again nested on Miller Sands Spit in the Columbia River estuary

in 2011, after initial colonization of the site in 2010.

In 2011, the two largest colonies of Caspian Terns in eastern WA were again at Crescent Island, on the mid-Columbia River near its confluence with the Snake River, and at Goose Island in Potholes Reservoir. Each colony consisted of about 420 pairs, with productivity somewhat greater at Crescent Island (0.32 fledglings/pair) than at Goose Island (0.28 fledglings/pair); data were comparable to recent years for both colonies. At least several hundred Caspian Terns also attempted to nest at multiple sites in coastal WA; however, terns were not successful at any site. Large numbers of terns that previously nested at the Port of Bellingham (at least 1300 pairs in 2010) were prevented from using this site in 2011, as the Port prepares to redevelop the area used by terns during 2009–2010.

Foundation Island, located 9 km upriver from Crescent Island, is the site of the largest Double-crested Cormorant breeding colony on the mid-Columbia River. This tree-nesting colony consisted of at least 318 nesting pairs in 2011, similar to recent years. The largest Double-crested Cormorant colony in the Columbia Plateau region, however, continues to be at Potholes Reservoir, where around 900 pairs nested in trees at the north end of the reservoir in 2011.

Implementation of the Caspian Tern Management Plan continued in 2011. Available habitat at the East Sand Island colony in the Columbia River estuary was incrementally decreased to 2.0 acres, down from 3.1 acres in 2010. Two newly constructed islands became available in the Lower Klamath National Wildlife Refuge Complex in northeast CA, at Tule Lake and Orems Lake. A total of seven islands constructed by the U.S. Army Corps of Engineers in recent years were available in 2011, including three in the Klamath River basin in northeast California, two at the Summer Lake Wildlife Area plus one at Crump Lake in southeastern OR, and one at Fern Ridge Reservoir near Eugene in western OR. Four of these sites were used by nesting terns: islands in Sheepy Lake and Tule

Lake in California's Klamath Basin, and in Oregon's Crump Lake and the East Link Impoundment of the Summer Lake Wildlife Area. A total of 260 pairs of Caspian Terns nested at these restoration sites in 2011, with generally poor productivity (0.0–0.4 fledglings/pair). Limiting factors in 2011 included climate (a cold and wet spring), presumed poor forage fish availability, nest depredation by gulls, and disturbance by Great-horned Owls (*Bubo virginianus*).

Participants in the study included (OSU), Real Time Research (RTR), USGS, and the interagency Caspian Tern Working Group, including National Oceanographic and Atmospheric Administration (NOAA)–Fisheries, U.S. Army Corps of Engineers, USFWS, ODFW, Washington Department of Fish and Wildlife (WDFW), Idaho Department of Fish and Game, Columbia River Inter-Tribal Fish Commission, and others. This year's research team included **Dan Roby** (USGS/OSU); **Jessica Adkins**, **Kirsten Bixler**, **Stefanie Collar**, **Tim Lawes**, **Pete Loschl**, **Don Lyons**, **Allison Mahoric**, **Allison Patterson**, **Adam Peck-Richardson**, **Yasuko Suzuki**, and **James Tennyson** (OSU); **Ken Collis**, **Brad Cramer**, **Allen Evans**, **Mike Hawbecker**, and **Nathan Hostetter** (RTR); and numerous seasonal technicians and volunteers. This study was funded by the Bonneville Power Administration and the U.S. Army Corps of Engineers.

**Kim Nelson**, of the Oregon Cooperative Fish and Wildlife Research Unit at OSU, continued her research on the traditional ecological knowledge of seabirds and marine mammals at King Island in the Bering Sea, in cooperation with **Deanna Kingston** (Department of Anthropology, OSU), the National Science Foundation, and the Elders of King Island on a project entitled "Documenting the Cultural Geography, Biogeography, and Traditional Ecological Knowledge of King Island, Alaska". Using extensive interviews with Elders combined with meetings and visits to King Island and Nome/Cape Woolley, she is compiling information on the birds and marine mammals on and around

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King Island, creating a bird guide for use by the Elders and their families, associating bird and mammal habitat with place names on King Island, and summarizing traditional uses of birds and mammals on King Island and the Seward Peninsula. Integrating seabird ecology with Inupiat folklore is a current priority.

**Dee Boersma**, University of Washington, is in year 29 of studying the Magellanic Penguin (*Spheniscus magellanicus*) colony at Punta Tombo, Argentina. (This colony is on an Atlantic coast and hardly should be considered under PSG interests, but the species forages well into the nearby Pacific.) The Galapagos Penguin (*S. mendiculus*) was her first love, and Boersma returned to determine whether the penguins are nest-site limited. She built 120 “condos” with lava rocks on the islands. The penguins have should have had a great breeding year in 2010-11, a La Niña year, but surface water temperatures were unusually warm in the Galapagos, with heavy rainfall—more like what happens in an El Niño year. The La Niña is supposed to continue, so maybe the upwelling will return and penguins can breed this year in 2011-12. Boersma hopes they’ll vote with their feet on how well they like the condos.

### PELAGIC STUDIES

**Martin Raphael** and **Tom Bloxton** of the USFS Pacific Northwest Research Station in Olympia, WA, continued collaborative studies on Marbled Murrelets and other seabirds in Puget Sound, Strait of Juan de Fuca, and Hood Canal (WA) during 2011. This was their twelfth year of long-term population monitoring of murrelets at sea under the Northwest Forest Plan, along with researchers elsewhere in WA, OR, and northern CA. The NWFP is a large-scale ecosystem management plan for federal lands in the Pacific Northwest of the US. Raphael and Bloxton surveyed murrelets and other seabirds and marine mammals in Recovery Zone 1, from the San Juan Islands to Olympia in Puget Sound and the Strait of Juan de Fuca. They also continued collecting baseline data on

within-season and annual changes in distributions, densities, and productivity indices (as estimated from ratios of juvenile to adult birds) of murrelets in the San Juan Island archipelago—a data set that goes back to 1995. Analysis of population trends in other species surveyed (e.g. Ancient Murrelet [*Synthliboramphus antiquus*], Cassin’s Auklet [*Ptychoramphus aleuticus*], Common Murre, Pigeon Guillemot, Rhinoceros Auklet, and Tufted Puffin) for all of WA is being conducted in collaboration with **Scott Pearson** of WDFW.

**Emily Runnells**, a Masters student in the School of Aquatic and Fishery Sciences at the University of Washington, with the assistance of **George Hunt**, has been working to repeat the earlier study of **Jen Zamon** (now with NOAA–Fisheries). Jen quantified the foraging activities of seabirds in the southern end of San Juan Channel (Cattle Pass), in the San Juan Islands. Emily’s Masters research has been documenting the foraging activities of seabirds in Cattle Pass and quantifying the distribution and abundance of forage fish, using a four-frequency quantitative acoustic array. She also has been sampling zooplankton with a small ring net, and assessing hydrography with a CTD from a 13.5-foot Boston whaler. This whaler has an interesting past, having supported not only Jen Zamon’s research, but also that of **Libby Logerwell** and George Hunt, in Maine and at Mandarte Island, British Columbia. Emily gathered data in 2010 and 2011, with the help of two Research Experiences for Undergraduates/Blinks Fellows in each year. The project is scheduled to be finished in 2012.

**George Hunt**, **Martin Renner**, and **Kathy Kuletz** (USFWS, Anchorage) are working with the North Pacific Pelagic Seabird database, assessing changes in the distribution and abundance of seabirds over 35 years (since 1975), the period for which quantitative at-sea data have been gathered in Alaskan waters. We are examining changes for Northern Fulmars (*Fulmarus glacialis*) and albatrosses (*Phoebastria* spp.) in the eastern

Bering Sea, and investigating long-term patterns in cross-shelf and along-shelf distributions and abundance. We plan to examine decadal-scale variability in number of seabirds using the eastern Bering Sea, and to relate observed patterns to those of zooplankton with the help of **Ken Coyle** (University of Alaska, Fairbanks). We will have several papers in the works by the end of spring 2012.

### FISHERIES BYCATCH

**Ed Melvin**, **Troy Guy** and **Sarah Jennings** of Washington Sea Grant, along with **Rob Suryan** of OSU, are in the final stages of assessing spatial and temporal overlap of albatrosses and groundfish fisheries along the west coast. They are working with **Tom Good** and others at the NOAA’s Northwest Fisheries Science Center to draft a risk assessment in these fisheries for seabirds that are listed under the federal Endangered Species Act. They are developing plans to continue education outreach in fishery sectors where fishing effort has high overlap with albatross foraging ranges.

**Ed Melvin** and **Troy Guy** continue to collaborate with the Japanese tuna fishing industry, and with scientists from the National Research Institute of Far Seas Fisheries, to develop best-practice mitigation of seabird bycatch for pelagic longline fisheries. Results from our recent studies in South Africa showed that seabird bycatch is reduced dramatically by the simultaneous use of branchline weighting, paired bird scaring lines, and night setting of fishing gear. These results have been adopted as best practice by the multi-national Agreement for the Conservation of Albatrosses and Petrels, and the findings are informing the management process in Regional Fisheries Management Organizations throughout the southern hemisphere. A fishing master with whom the team worked during the South Africa research was awarded the grand prize and the tuna prize in the World Wildlife Fund’s 2011 Smart Gear competition. This award is likely to hasten adoption of branchline weighting in world tuna fisheries.

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### OTHER WORK

**Jo Smith** (then at The Nature Conservancy, Seattle, WA) worked with federal and state agencies, treaty tribes and coastal communities in WA to advance coastal and marine spatial planning. She was helping to develop marine spatial planning objectives, which included conservation targets such as breeding and migratory seabirds and ocean habitats, and she helped the Quinault Indian Nation to secure a grant from the NOAA to remove derelict nets from waters within their Usual and Accustomed Areas.

**Roy Lowe, Khem So, and Shawn Stephensen** of OCNWR, with **Rob Suryan** (OSU), are working with ODFW on conservation efforts for seabirds that could be affected by marine spatial planning for renewable energy development in the Territorial Sea (0-3 miles offshore). They attended a workshop on Ecological Data Atlas Science, along with other interested agencies, individuals, and data contributors. The workshop reviewed data and methods used in the Ecological Atlas project, a marine spatial planning tool that will be incorporated into Oregon's Territorial Sea Plan process. The Ecological Atlas is a collection of data sets (biological, oceanographic, and habitat) that can be displayed and analyzed in a spatially explicit way to determine ecological hotspots in the Territorial Sea. We submitted data from the Oregon Seabird Colony Catalog, which lists important breeding sites and population numbers of seabirds in Oregon. These important bird areas will receive special consideration during the planning of renewable energy development.

**David Ledig**, together with **Nancy Post** of the City of Bandon and the Bandon Committee for Involved Citizens, put on a seminar concerning the development of a "Dark Skies" ordinance. Presentations at the seminar included: "Effects of Light Pollution on Seabirds and Wilderness Characteristics of Oregon Islands National Wildlife Refuge"; "Light Pollution Effects on Wildlife," by Free Flight Wildlife Education Center; and "Effects of Urban Light Pollution on Astronomy." There were displays

of "Cut-off" lighting fixtures and discussions on development of the "Dark Skies" ordinance. The Seminar was attended by 75 people from the Bandon area. Public comments were gathered and will be presented with a draft ordinance for review by the City of Bandon Planning Commission.

**Lora Leschner** continued in her role as the Washington coordinator for Pacific Coast Joint Venture ([www.pcvj.org](http://www.pcvj.org)), a public-private partnership for conservation of migratory birds.

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### NON-PACIFIC UNITED STATES AND CARIBBEAN Compiled by Iain Stenhouse

#### PELAGIC STUDIES

**Tim Jones, Melanie Steinkamp, and Emily Silverman** (U.S. Fish and Wildlife Service [USFWS]) coordinated and participated in a massive survey effort to collect baseline information on marine bird distributions and abundance along the Atlantic coast in August 2011. The survey is part of the multi-agency Atlantic Marine Assessment Program for Protected Species, a coordinated effort among the National Oceanic and Atmospheric Administration (NOAA)—Fisheries; USFWS; Bureau of Ocean Energy Management (BOEM; a successor to the agency that was known in 2010–2011 as BOEMRE), and the U.S. Navy. The survey extends from Cape Canaveral, Florida, to the Canadian border. Three USFWS pilot-biologists flew 195 transects perpendicular to the coastline, spaced at 5 nautical miles (nm), with data being collected on almost 7200 nm. Survey crews recorded all seabirds, marine mammals, and sea turtles. Preliminary reports on data collected are anticipated early in 2012. Two further surveys will be flown in 2012 (spring and fall), with funding from NOAA—Fisheries.

**Richard Veit** (City University of New York [CUNY]), and PhD students **Tim White, Marie Martin** and **Holly Goyert**, continue ship-based surveys of the US continental shelf between Maine

and North Carolina, funded by BOEM and USFWS. Veit, **Simon Perkins**, and **Tim White** have also been granted a contract from the Massachusetts Clean Energy Commission to conduct aircraft surveys of seabirds on the continental shelf south of Nantucket and Martha's Vineyard.

**Scott Johnston** (USFWS) will be overseeing a four-year project aimed at determining fine-scale occurrence and local movement patterns of diving birds in federal waters of the mid-Atlantic. Project collaborators, including **Tim Bowman** (Sea Duck Joint Venture), **Lucas Savoy, Jim Paruk, Iain Stenhouse** of the Biodiversity Research Institute (BRI), and **William Montevecchi** (Memorial University of Newfoundland [MUN]), will attach satellite transmitters to Red-throated Loons (*Gavia stellata*), Surf Scoters (*Melanitta perspicillata*), and Northern Gannets (*Morus bassanus*) beginning in winter 2012. Movement data will be used to inform permitting and regulation of future offshore energy development in the region.

BRI is currently in negotiation with the U.S. Department of Energy to carry out broad-scale baseline surveys for marine birds, marine mammals, and sea turtles in the mid-Atlantic region over the next two years, using a combination of boat-based and high-definition digital video aerial surveys. Among others, **Iain Stenhouse** (BRI) and **Richard Veit** (CUNY) are co-principal investigators on this project.

**Patrick Jodice** of the U.S. Geological Survey [USGS] Cooperative Research Units and Clemson University [CU], along with **Will Mackin**, continues to expand tracking studies of pelagic seabirds breeding in the Bahamas and Caribbean. Pat is also working with **Chris Haney** (Defenders of Wildlife) and **Ann Sutton** and **Lisa Sorenson** (Society for the Conservation and Study of Caribbean Birds) on a grant to enhance the capacity of seabird science in the Caribbean. Funding was by the National Fish and Wildlife Foundation.

#### COLONY-BASED STUDIES

**Linda Welch** (Maine Coastal Islands National Wildlife Refuge), **Steve**

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**Kress** (National Audubon Society, Seabird Restoration Program), and others recaptured 11 Arctic Terns (*Sterna paradisaea*) that were equipped with geolocators at two Maine colonies in 2010. The data are currently being processed. Linda and others have also deployed 11 satellite transmitters (7 in 2010 and 4 in 2011) on Greater Shearwaters (*Puffinus gravis*). The birds were tagged off the coast of Maine in August of both years. The units are programmed to transmit each day (6 hr on/18 hr off) and have lasted an average of 112 days, with a maximum of 180 days. The maximum distance traveled was 44,456 km.

**Iain Stenhouse** (BRI) started what he hopes will become a long-term monitoring program on mercury exposure in Black Guillemots (*Cepphus grylle*) and Leach's Storm-Petrels (*Oceanodroma leucorhoa*) at Little Duck Island, Maine (owned by NAS).

**Jeff Spendelow** (USGS) continues to oversee the long-term studies of Patuxent Wildlife Research Center on the metapopulation dynamics and ecology of Roseate Terns (*Sterna dougallii*). Since 1987, the focus has been on Roseate Terns nesting in the MA-Connecticut (CT)-New York (NY) region. In 2011, however, chicks from colony sites in CT, New Hampshire, Maine, and Nova Scotia (NS) were banded with plastic field-readable bands (3 characters). Over 270 chicks (and 16 adults in NS) were color-banded. A pilot study was conducted during the post-breeding dispersal period (mid July to September) on the use of staging sites in southeastern MA by birds from different parts of the breeding range. In 2011, Jeff was assisted by **David Monticelli** (post-doc from Belgium) and other volunteers and cooperators (**Michelle Avis**, **Ellen Jedrey**, **Vern Laux**, **Edie Ray**, **Nuray Taygan**, **Richard Veit**). Almost 60% of young birds color-banded in 2011 were resighted. In early September, 51 color-banded birds (more than 20% of those banded in the northern part of their breeding range) were resighted in a 5-hour period at Cape Cod National Seashore, MA.

Research on seabird colonies in South Carolina continued under the guidance of **Patrick Jodice** (USGS-CU). **Lisa Eggert** (PhD candidate at CU) assessed effects of predation and disturbance of reproductive success of Black Skimmers (*Rhynchops niger*) at two colonies in South Carolina. **Gillian Brooks** (CU) completed her MS research, which assessed reproductive success of Black Skimmers and Least Terns (*Sternula antillarum*), particularly in relation to predation and flooding.

In the Caribbean, **Sarah Trefry** (Atlantic Laboratory for Avian Research, Fredericton, New Brunswick, Canada) is approaching her last field season on Barbuda Island. She is studying Magnificent Frigatebirds (*Fregata magnificens*), and is writing up the results of a study of effects of wing-tags on frigatebird breeding success.

### OIL SPILL DAMAGE ASSESSMENT

Along with **David Evers** and **Jennifer Goyette** (BRI), **Patrick Jodice** and **Lisa Eggert** (CU) completed a Natural Resource Damage Assessment (NRDA) study of injury to water birds from the *Deepwater Horizon* oil spill in the Gulf of Mexico (April 2010). They deployed radio and satellite transmitters on Black Skimmers and Brown Pelicans (*Pelecanus occidentalis*) to monitor survival and movements of birds captured in the northern Gulf of Mexico and the South Atlantic Bight.

**Iain Stenhouse** (BRI) and **William Montevecchi** (MUN) co-lead an NRDA project to assess the oiling rates of Northern Gannets wintering in the Gulf of Mexico. Using standard strip transects, they also collected information on the distribution of all marine birds in the study area.

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## HAWAII

Compiled by **Holly Freifeld**

### COLONIES

**Cary Deringer** and **William Pitt** of the National Wildlife Research Center, U.S. Department of Agriculture (USDA)

studied the endangered Hawaiian Petrels (*Pterodroma sandwichensis*) and threatened Newell's Shearwaters (*Puffinus auricularis newelli*) in Kohala Mountain during June and July, using ornithological radar, visual, and auditory surveying methods. They assessed flight-corridor populations and coastal movement patterns, and assisted the Hawai'i Division of Forestry and Wildlife in documenting the presence of Hawaiian Petrels. Radar results indicated a 76% decline in passage rates at Waipi'o Valley since 2001. Auditory surveys, undertaken in collaboration with the Kaua'i Endangered Seabird Recovery Project (KESRP), identified areas of localized Hawaiian Petrel calling that probably signify breeding by this species within Pu'u O 'Umi Natural Area Reserve. Cary is currently working with **Christopher Lepczyk** at the University of Hawai'i at Mānoa to conduct radar surveys in Waimanu Valley for improving population assessments in the region. The method should also help with studies of coastal and inland movement patterns to assist colony searches, improve productivity monitoring, and further investigate declining trends in Waipi'o Valley.

**Marie Morin**, **Tracy Anderson**, **Marilou Knight**, **Megan Dalton**, **Emily Pollom**, and **Elisa Weiss** of the Save Our Shearwaters Program on Kaua'i continue to coordinate with other groups on Kaua'i working on the conservation of Newell's Shearwater, Hawaiian Petrel, and Band-rumped Storm-Petrel (*Oceanodroma castro*). With the addition of Tracy, the rehabilitation capability has expanded to include some other high-priority migratory birds, including seabirds and endangered Hawaiian water birds, when budget allows.

**Lindsay Young** (Pacific Rim Conservation) finalized construction of a predator-proof fence to protect Laysan Albatross (*Phoebastria immutabilis*) and Wedge-tailed Shearwaters (*Puffinus pacificus*) at Kaena Point, on the island of O'ahu, followed by removal of five species of predators, which occupied most of 2011. All predators except mice (*Mus musculus*) were removed within three

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months, and even mice are believed to be gone now from the reserve. Wedge-tailed Shearwaters had a record-setting year at Kaena in 2011, producing more than 1700 fledglings. This increase is due in large part to the fence, which is the first of its kind in the United States. Hopefully Laysan Albatross will experience similar benefits and have high reproductive success in 2012, and other seabirds may now colonize this protected area. Lindsay continues long-term demographic monitoring of Red-tailed Tropicbirds (*Phaethon rubricauda*) with Eric VanderWerf, and Laysan Albatrosses on O'ahu. She recently started working on surveys for Hawaiian Petrels and Newell's Shearwaters on Maui.

Since 2007, **Eric VanderWerf** (Pacific Rim Conservation) has been controlling predators, including black rats (*Rattus rattus*), small Indian mongoose (*Herpestes auropunctatus*), and feral cats (*Felis sylvestrus*), to protect the small colony of Red-tailed Tropicbirds on the Ka Iwi coast of O'ahu, in close proximity to the southeastern suburbs of Honolulu. The number of nesting attempts and chicks fledged has increased steadily since predator control began, from only five chicks fledged in 2005 to 26 in 2011. All monitoring and predator control at this colony have been done by volunteers, but starting in 2012 this project will be supported by the Hawai'i Division of Forestry and Wildlife. It is hoped that as this colony continues to grow, it can serve as a source of colonists for other locations on O'ahu. Up to seven Red-tailed Tropicbirds have been observed courting at Kaena Point, O'ahu, and completion of the predator-fence and removal of all predators in 2011 may encourage these birds to begin nesting at Kaena Point.

**Lee Ann Woodward** of the U.S. Fish and Wildlife Service (USFWS, Pacific/Remote Islands National Wildlife Refuge Complex) collaborated with **Sheldon Plentovich** (USFWS Pacific Islands Office) to identify and test formicides and application methods that can be used to eradicate yellow crazy ants (*Anoplolepis gracilipes*; YCA) from

seabird colonies throughout the Pacific Islands. Testing has occurred on Johnston Atoll and Kaneohe Marine Corps base. YCA are a scourge of seabirds and drastically reduce nest success and numbers of nesting birds in colonies that they invade. Lee Ann participated in developing and implementing a YCA eradication project on Johnston Atoll. The ants were discovered on Johnston in January 2010, and a Crazy Ant Strike Team (CAST) was formed and deployed in August of that year to begin eradication of the infestation, which covers about 40 acres of the 260-acre atoll. Eradication is proving to be a challenge, but the CAST is making progress and efforts will continue.

**Beth Flint** (USFWS, Pacific Reefs National Wildlife Refuge Complex) is collaborating with scientists from USFWS and the U.S. Geological Survey on management responses to the loss of breeding habitat for the Black-footed Albatross (*Phoebastria nigripes*) due to climate change effects. The group is using Structured Decision Making techniques to formulate strategies. Beth also participated in a workshop organized by the National Oceanographic and Atmospheric Administration (NOAA)—Fisheries, USFWS, and the Marine Conservation Institute to prescribe research needed to improve understanding of relationships between seabirds and tuna populations in pelagic areas of the Pacific Remote Islands Marine National Monument. She was part of a large team from USFWS, The Nature Conservancy, and Island Conservation (IC) that conducted a rat eradication operation at Palmyra Atoll. She is currently working with the U.S. Air Force and IC on preparations for a similar effort at Wake Atoll, which is scheduled for 2012.

### PELAGIC

**Trevor Joyce** just completed the first year of his PhD at Scripps Institution of Oceanography in La Jolla, California (CA). His thesis research will investigate the impacts of tuna fisheries and El Niño-Southern Oscillation variability on the ecological and behavioral associations of tuna and seabirds in the tropical

Pacific. Trevor is working with at-sea survey data from the NOAA Southwest Fisheries Science Center, and is using global location sensing (GLS) to track movements and habitat-use patterns of Newell's Shearwaters and Hawaiian Petrels on Maui and Kaua'i. Collaborators are **Josh Adams** (USGS, Western Ecological Research Center) and **Jay Penniman** (Pacific Cooperative Studies Unit). Trevor also recently took part in a Pacific Islands Fisheries Science Center expedition to document the distribution and abundance of seabirds and marine mammals in the Exclusive Economic Zone around Palmyra Atoll.

**Lindsay Young** (Pacific Rim Conservation) continues at-sea tracking of track Wedge-tailed Shearwaters, Red-tailed Tropicbirds, and Red-footed and Brown Boobies (*Sula sula* and *S. leucogaster*) on Lehua Islet off of Kaua'i, with co-principal investigators.

### OTHER WORK

Linda Elliott, founder, president and Center Director of the Hawai'i Wildlife Center (HWC) presided over its grand opening on 19 November 2011. This is the first state-of-the-art response facility in the Pacific islands exclusively for native wildlife. The center is the culmination of her work since 1995 to bring this resource to the "extinction capital of the world." The wildlife that will be treated at the HWC include seabirds, shorebirds, water birds, birds of prey, and the Hawaiian hoary bat (*Lasiurus cinereus semotus*). The HWC will provide the best achievable medical and husbandry care for sick, injured, contaminated, and orphaned native wildlife, including those affected by natural and man-made disasters, and aims to return rehabilitated animals back to the wild. HWC continues collaborating with the Save Our Shearwater program on Kaua'i and provides oiled seabird response training, preparedness and consultation to the Pacific Islands region. The HWC's mission—to protect, conserve and aid in the recovery of Hawaii's native wildlife through hands-on treatment, research, training, science education and cultural programs—will be achieved through

## REGIONAL REPORTS • Hawai'i

### ASIA

Compiled by Yutaka Watanuki

the integrated operation of three related components: the wildlife treatment facility, an interpretive lanai, and an education pavilion.

**David Kuhn**, of SoundsHawaiian ([www.soundshawaiian.com](http://www.soundshawaiian.com)) is involved in gathering and archiving recordings of Hawaii's seabirds, especially Newell's Shearwater, Hawaiian Petrel, and Band-rumped Storm-Petrel. These recordings are being used in various projects throughout the islands, including social attraction projects for Newell's Shearwater at Kilauea Point National Wildlife Refuge (with KESRP) and at Kaena Point Natural Area Reserve (with Pacific Rim Conservation, <http://pacificrimconservation.com>), and various education tools and programs of the Conservation Council for Hawai'i (<http://conservehi.org>). SoundsHawaiian offers support in the efforts of KESRP, including the search for active colonies of these imperiled seabirds in the difficult mountainous terrain of Kaua'i, and ongoing conservation work at known breeding colonies. Notable gaps in the archives of SoundsHawaiian include recordings of Christmas Shearwater (*Puffinus navitatis*) and Bulwer's Petrel (*Bulweria bulwerii*), now elevated to high-priority goals.

**David Duffy** (University of Hawai'i) has review articles in press: one on feral cat ecology and management in the Pacific (in *Pacific Science*), and another on responses to climate change in Oceania (in *Pacific Conservation Biology*). A review of climate change and Hawaiian seabirds with **Lindsay Young** and **Roger Lukas** remains chronically unfinished.

#### COLONY WORK AND SURVEYS

**Tadashi Fujii** and his team investigated the distribution of seabirds in the Seto Inland Sea of Japan to collect fundamental data on habitat utilization. Data will be used for seabird preservation in this highly developed area. The team focused on Arctic Loons (*Gavia arctica*), Pacific Loons (*G. pacifica*), and Japanese Murrelets (*Synthliboramphus wumizusume*).

**Drs. Kentaro Kazama** and **Akihiko Niizuma** started a new project to examine the influence of nutrient inputs by the Great Cormorant (*Phalacrocorax carbo*) and Black-tailed Gull (*Larus crassirostris*) to rice paddies and the shore ecosystem.

Many projects on the Streaked Shearwater (*Calonectris leucomelas*) were carried out in 2011, including GPS tracking (**Drs. Ken Yoda, Carlos Zavalaga, Katsufumi Sato**), year-round tracking with geolocators (**Takashi Yamamoto, Dr. Akinori Takahashi**), chick growth, and energy consumption (**Drs. Maki Yamamoto** and **A. Niizuma**).

The Short-tailed Albatross (*Phoebastria albatrus*) colony restoration project, led by **Dr. Tomohiro Deguchi** and his colleagues (Yamashina Institute for Ornithology) and team members from the USA, was very successful this year. The final year of the project will be starting soon.

At Teuri Island, **Dr. Yutaka Watanuki Ochi** and **Hiroshi Minami** and

his team continued long-term monitoring of chick diets and breeding performance of three seabird species.

**Nobuhiro Katsumata** and **Drs. Yukiko Inoue, Noriyoshi Sato, Daisuke Ochi** and **Hiroshi Minami** are working to develop effective seabird bycatch mitigation gear for tuna longline fisheries. They are collecting data on the distribution and foraging ecology of incidentally caught seabirds, mainly albatrosses (*Phoebastria* spp.) and petrels (*Pterodroma* spp.), through on-board research.

#### IMPACTS OF NUCLEAR POWER PLANTS

Researchers are evaluating the impact on seabirds of the tsunami disaster and the emission of radioactive materials from the Fukushima Daiichi nuclear power plant in the Tohoku area. The route survey group of the Japan Seabird Group (JSG), led by **Dr. Akihiko Niizuma**, started an at-sea survey of seabird distribution from ferries, supported by the Japan Seabird Group fund. **Drs. Kiyooki Ozaki** and **Yasuyuki Shibata** measured the level of radioactive isotopes in regurgitations and eggs of albatrosses.

The JSG and the Pacific Seabird Group agreed to send a letter to Japanese Government about the planned Kaminoseki Nuclear Power Plant, whose construction is proposed on landfill within a national park in Yamaguchi Prefecture, southern Honshu. The letter focuses on research and conservation of seabirds in the adjacent Seto Inland Sea.

# INFORMATION FOR CONTRIBUTORS

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Pacific Seabirds is a journal of the Pacific Seabird Group (PSG). The journal appears twice a year, in spring and fall (autumn). Manuscripts and news items are welcome on any topic relating to Pacific seabirds or to their conservation. Short manuscripts are preferred (about 1000 to 5000 words for major submissions). Submit materials to the Editor (except as noted below): Dr. V.M. Mendenhall, 4600 Rabbit Creek Road, Anchorage, Alaska 99516; e-mail [fsgadair@attalasc.com](mailto:fsgadair@attalasc.com). Deadlines are normally 20 March for the spring issue and 20 September for the fall issue.

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## EDITORIAL POLICY

*Pacific Seabirds* welcomes contributions on work and issues relevant to seabirds anywhere in the Pacific region. *Pacific Seabirds* reflects the policies of PSG's Executive Council. On issues for which such a policy has not been expressed, the journal aims for an unbiased presentation of all points of view. The editor welcomes letters and other feedback.

## CONTRIBUTIONS

Contributors are invited to submit the following:

- **Articles** on original research (to be peer-reviewed)
- **Reports** on current topics (e.g., research in progress or seabird conservation issues; not peer-reviewed)
- **Forum** articles are columns on a current topic, either in research and conservation, or other issues within or outside PSG. If a topic may be controversial, the editor reserves the right to invite comment or an accompanying article that may present another viewpoint.
- **Review articles** (these may cover seabirds worldwide)
- **Conservation News** (*submit to* Jo Smith, Associate Editor for Conservation; [josmith@birdsmith.ca](mailto:josmith@birdsmith.ca))
- **News items** (short news relating to seabird research, conservation, or the Pacific Seabird Group)
- **Book reviews**
- **Letters** commenting on content of *Pacific Seabirds* or other issues
- **Art work**, such as sketches or photos of seabirds, either accompanying a text or for publication alone

## SUBMISSION OF MANUSCRIPTS

Material may be submitted by e-mail or regular mail (addresses above). Materials sent by e-mail should be attached to the main message and should be in Word or Rich Text Format, except that materials less than 300 words long may be sent in the body of the e-mail. For manuscripts submitted by e-mail, figures must also be sent as separate files or via regular mail. If a manuscript is submitted by regular mail, include a CD. The language of *Pacific Seabirds* is English; an abstract or summary may be duplicated in a second language, if desired.

## PEER-REVIEW OF MANUSCRIPTS

Articles and review articles will be submitted to two peer reviewers for technical review. Authors are invited to suggest reviewers. Other submissions may also be sent for review, if (a) the author requests this, or (b) at the editor's discretion.

## FORMAT OF MANUSCRIPTS

Contributors should follow these guidelines. For other details, consult the format in a recent issue of *Pacific Seabirds*. Back issues are online at [www.pacificseabirds.org](http://www.pacificseabirds.org)

## GENERAL FORMAT

Manuscripts should be double-spaced with 1-inch margins. If your paper size is A4 (European), **the bottom margin must be at least 1¾ inch** (including in electronic files), to ensure that it will print properly on US equipment. Pages should be numbered, except for Tables and Figures.

Give the scientific name (*italicized*) after the first mention of any genus or species. English names of bird species are capitalized (e.g., Fork-tailed Storm-Petrel). Names of mammals, other taxa, and English names of bird groups are lowercase, except for proper names (e.g., blackbirds, shield fern, Steller's sea cow).

If you use an acronym, give the entity's *full* name the first time it is mentioned. Avoid excessive use of acronyms.

Use the 24-hour clock without a colon (e.g., 1830). Give dates as day-month-year. Use metric measures, except when quoting informal statements. For quantities less than 1, use an initial 0 ( $P = 0.95$ , not  $P = .95$ ).

Typographical conventions follow *Scientific Style and Format*, 6th edition, by the Style Manual Committee of the Council of Biology Editors; Cambridge University Press (1999).

## ORGANIZATION

**Articles** should contain the following sections, in this order: Title, Author(s), Authors' affiliations (including e-mail for corresponding author), Abstract, Key words, Introduction, Methods, Results, Discussion, Acknowledgments, Literature Cited, Tables, Figure legends, and Figures. **Other types of manuscript** may use a different organization (e.g., a review or report could contain sections on various locations); however, the same formats for Literature Cited, Tables, and Figures will apply.

**Abstract**—An abstract is required for longer articles and suggested for short ones. It should contain essential

## INFORMATION FOR CONTRIBUTORS

information from each section of the text, without statistics. One or more additional abstract(s) may be provided in languages other than English.

**Key words**—Five to 10 words for use in computerized searching. Species names in both Latin and English should be included.

**Introduction**—Present the aims and significance of the work, and place it in the context of pre-existing information. State hypotheses that are being tested, if any.

**Methods**—Describe the methods, location, time, and personnel of the study. Include statistical methods, if any.

**Results**—Present results that are pertinent to aims given in the Introduction. Where feasible, summarize information and give the full data in Tables or Figures. Give sample sizes and the significance levels of statistical tests. Literature citations normally should not be in the Results section.

**Discussion**—Summarize the results briefly, then evaluate the results, and develop their importance in relation to other work. Do not include primary results and statistical tests, which belong in Results.

**Citations in the text** should be “Surname year.” Two authors are “Surname and surname year”; 3 or more authors are “Surname et al. year” (but all authors should be given in the Literature Cited). E.g., (Pratt et al. 1987, Schreiber and Schreiber 1988). If appropriate, specify page number(s) in a book or long article (Pratt et al. 1987:32-34).

Use the “Name–Year” format for citations (common in ornithological journals), not the “Citation–Sequence” format (e.g., *Science*).

**Literature Cited**—List all references in alphabetical order of the authors’ surnames. Surname of the first author should be listed first, then initials; subsequent authors’ names should be listed as Initial(s), Surname. List all authors in the Literature Cited (do not use “et al.”). Year of publication follows, then

title and journal reference. Include page numbers for all cited works, including the total number of pages in a book. Use standard abbreviations for journal titles; if you are unsure, spell them out. Spell out names of agencies and institutions.

The first line of each citation should be justified to the left margin; subsequent lines may be left-justified or indented. Do not use all-capital letters or italics in the Literature Cited, except that scientific names should be in italics. Examples:

Pratt, H.D., P.L. Bruner, and D.G. Berrett. 1987. A field guide to the birds of Hawaii and the tropical Pacific. Princeton University Press, Princeton, NJ. 409 pp.

Schreiber, E.A., and R.W. Schreiber. 1988. Great Frigatebird size dimorphism on two Central Pacific atolls. *Condor* 90:90-99.

Verify that all items in the Literature Cited are referenced in the article, and vice versa.

For articles that you have read in a language other than English, list the citation in the original language. An English translation of the title [in brackets] is optional.

### SUPPORTING MATERIALS

**Tables**—Tables should be numbered in the order they are first mentioned in the text. Refer to each table at least once. Use horizontal lines below the main heading(s); do not use vertical lines in tables. The Table (including its heading) should be comprehensible without immediate reference to the text. Data in Tables should not be repeated in the text, except to summarize.

**Figures**—Figures should be numbered in the order they are first mentioned in the text. Refer to each figure at least once. Figures should be drawn at least 50% larger than they will appear in print. Make all lettering, numbers, and symbols large enough to be read easily after they are reduced. The figure (including caption) should be comprehensible without immediate reference to the text. Define all symbols in a legend or the caption.

Shading in figures should be black, white, or coarse cross-hatching; *do not use half-tone shading or background* (pattern of fine dots).

For each figure, a high-quality graphics file or original drawing must be submitted with the final version of the manuscript. Graphics files should be in TIFF (preferably), GIS, or EFS format, separate from the text document. A high-resolution JPG file may work; graphics in Word format are not acceptable.

**Photographs**—*Pacific Seabirds* occasionally publishes photos. The best ones are very sharp, with good detail and a range of dark/light values. Digital images submitted by e-mail must be at least 250 ppi (when reduced to publication size). The common low-resolution snapshot (often 72 ppi) does not reproduce well in publication; most cameras give the option of higher resolution. Do not submit a half-tone print (published image that’s actually a pattern of tiny dots), if possible. If the original is in color, submit it in that format; the editor will convert it to black and white.

**Art work**—Original art work is welcomed. The original or a high-resolution scan should be sent. Ink drawings should be scanned in “black-and-white” mode, pencil or charcoal in “gray-scale” mode.

### REVISIONS AND PROOFS

Materials that are sent for peer review will be returned to the author, along with reviewers’ and editorial suggestions. If the Editor has accepted the article, he or she will endeavor to return the manuscript within 60 days. If the article needs major work, the author may be invited to revise and re-submit it for future acceptance.

For peer-reviewed articles, proofs will be sent to the author before publication. Corrections should be returned within one week. Proofs of other materials will not usually be sent to the author unless he or she requests them.

# PUBLICATIONS OF THE PACIFIC SEABIRD GROUP

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The Pacific Seabird Group publishes symposia and other works. **PSG Symposia** are occasionally held at Annual Meetings; those which have been published are listed below. **Technical Reports** prepared by PSG working groups also are listed. *To order one of these PSG publications, please see instructions after each item.*

**Abstracts** of papers and posters given at PSG meetings are published annually. Abstracts for meetings of 1974 through 1993 appeared in the PSG Bulletin (Volumes 2–20); for meetings of 1994 through 2003, in Pacific Seabirds (Volumes 21–30); and for meetings of 1997 and later, at [www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)

PSG publishes the journals *Pacific Seabirds* ([www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)) and *Marine Ornithology* ([www.marineornithology.org](http://www.marineornithology.org)). Current and past issues of both journals are available online or by subscription. Back issues may be obtained online; those of Pacific Seabirds also are available from the PSG Treasurer (order form on last page).

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## SYMPOSIA

**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. *Available free of charge at* <http://elibrary.unm.edu/sora/Condor/cooper/sab.php>

**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. *Available free of charge at* <http://elibrary.unm.edu/sora/Condor/cooper/sab.php>

**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; available free of charge at* [www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)

**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. \$12.00. *Order from:* Ornithological Societies of North America, PO Box 1897, Lawrence, Kansas 66044; phone (800) 627-0629; no online orders.

**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. \$18.50. *Available free of charge at* <http://elibrary.unm.edu/sora/Condor/cooper/sab.php>

**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. *Available free of charge at* <http://elibrary.unm.edu/sora/Condor/cooper/sab.php>

**STATUS AND CONSERVATION OF THE MARBLED MURRELET IN NORTH AMERICA.** Harry C. 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. \$20.00. *Order from PSG Treasurer* (order form on last page), *or available free of charge at* [www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)

**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

## PSG PUBLICATIONS

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 free of charge from:** Publications Division, Canadian Wildlife Service, Ottawa, Ontario, K1A 0H3, Canada.

**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. \$12.00. **Order from PSG Treasurer** (order form on last page), **or available free of charge at** [www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)

**BEHAVIOUR AND ECOLOGY OF THE SEA DUCKS.** Ian Goudie, Margaret R. Petersen 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 free of charge from:** Publications Division, Canadian Wildlife Service, Ottawa, Ontario, K1A 0H3, Canada, **or available free of charge at** [www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)

**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. \$40.00. **Order from publisher.**

**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. \$75.00. **Order from PSG Treasurer** (order form on last page).

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

**THE BIOLOGY AND CONSERVATION OF THE AMERICAN WHITE PELICAN.** Daniel W. Anderson, D. Tommy King, and John Coulson (editors). Proceedings of a Symposium of the Pacific Seabird Group. *Waterbirds*, Volume 28. Special Publication 1, 2005. Published by the Waterbird Society. \$15.00. **Order from PSG Treasurer** (order form on last page).

**BIOLOGY AND CONSERVATION OF XANTUS'S MURRELET.** Harry R. Carter, Spencer G. Sealy, Esther E. Burkett, and John F. Piatt (editors). Proceedings of a symposium of the Pacific Seabird Group, Portland, Oregon, January 2005. Published 2005 in *Marine Ornithology* 33(2):81-159. **Available free of charge at** [www.marineornithology.org](http://www.marineornithology.org)

**SEABIRDS AS INDICATORS OF MARINE ECOSYSTEMS.** John F. Piatt and William J. Sydeman (editors). Proceedings of an International Symposium of the Pacific Seabird Group, Girdwood, Alaska, February 2006. Published 2007 in *Marine Ecology Progress Series* Volume 352:199-309. **Available free of charge at** <http://www.int-res.com/abstracts/meps/v352/#theme>

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## TECHNICAL PUBLICATIONS

**EXXON VALDEZ OIL SPILL SEABIRD RESTORATION WORKSHOP.** Kenneth I. Warheit, Craig S. Harrison, and George J. Divoky (editors). Exxon Valdez Restoration Project Final Report, Restoration Project 95038. PSG Technical Publication Number 1. 1997. **Available free of charge at** [www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)

**METHODS FOR SURVEYING MARBLED MURRELETS IN FORESTS: A REVISED PROTOCOL FOR LAND MANAGEMENT AND RESEARCH.** Pacific Seabird Group, Marbled Murrelet Technical Committee. PSG Technical Publication Number 2. 2003. **Available free of charge at** [www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)

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