PROGRAM OF EVENTS

Waterbirds 2015: Challenges and Responses.

College of the Atlantic
Bar Harbor, Maine August 11-15

Message from the President

Welcome to Bar Harbor, Maine, USA. The last time we met in New England was 15 years ago, in Manomet, Massachusetts. Now it's time to enjoy downeast Maine hospitality at the College of the Atlantic. Bar Harbor, originally called Eden, is situated on Mount Desert Island, the second largest island on the east coast of the US – an appropriate venue for the Waterbird Society's 39th annual meeting.

The scientific program promises to be outstanding, Meeting jointly with the American Oystercatcher Working Group gives us the opportunity to focus on oystercatcher ecology and further explore the world of Haematopology, introduced to us by Ted Simons in 2011 (Annapolis, MD). We have three riveting plenaries awaiting us and a special presentation by Steve Kress about his work with local superstar species, including the Atlantic Puffin. Six symposia will lead us deeper into species behavior, ecology, conservation, and management issues. And don't miss the general paper sessions or the posters.

Make sure to place your bids at the silent auction throughout the meeting and claim your treasures at the banquet. Proceeds go to student travel award funds.

Thanks to thoughtful planning by the local committee, we'll have plenty of opportunity to catch up with colleagues and meet new friends as we soak in the sea breezes – not to mention the lobster and beer.

Many thanks to the team who made this meeting happen – our noble and verdant local host, the College of the Atlantic, our exuberant local committee (John Anderson and Kate Shlepr), and our astute scientific program chair (Erica Nol).

Ayuh. We're looking forward to a wicked good meeting.

See you there,

Susan B. Elbin, President
The Waterbird Society

Welcome from the Local Committee

We, your loyal Local Committee, would like to welcome you to Maine –the Way Life Should Be! More particularly we would like to welcome you to Bar Harbor and College of the Atlantic. This meeting has been a long time incubating. More than a quarter of a century ago, then President Don McCrimmon suggested to one of us that COA would be a great place for a meeting. Ian Nisbet cheerfully suggested that slitting ones' wrists was a better way of doing oneself in than organizing a meeting and nobody wanted to meet in summer anyway. Now Don's idea is finally pipping & soon we hope for a cheerful fledgling! If you get lost or have questions, seek out a student wearing an Alice Eno Station t-shirt with a petrel logo and they will make sure you get where and what you need! Some things to think about while you are here:

Our host, College of the Atlantic, is the only college in the country whose sole degree is in Human Ecology. To us, Human Ecology can be defined very broadly as the study, interpretation and communication of humans and their many environments. This means that students are encouraged to pursue the Arts, Sciences and Humanities with equal vigour. Many students continue to graduate school in the Life Sciences, medicine, or veterinary studies, but others pursue Public Policy. Law, Literature, or Education. Some are full-time artists, others are farmers. All share a common passion for conservation and the environment. The College maintains two off-shore research stations: Blair Station on Mt Desert Rock 22 miles off shore and Eno Station on Great Duck Island somewhat closer in. We hope to share Great Duck and its gulls, petrels and guillemots with some of you at the close of the conference.

For all practical purposes, most of Campus is yours for the duration of the conference. We ask only that you not bother faculty and staff who have to work through the summer. The upper floors of the Turrets building are thus mostly off-limits unless you need to speak to a particular person directly. Please take advantage of our Dorr Museum of Natural History for a great intro to regional wildlife through dioramas constructed by talented students. There will also be an exhibit of paintings and drawings of Maine seabirds and islands to whet your interest in getting on the water. Admission is free, though donations are always gladly accepted.

Most Dorms have "break-out rooms" for those in-between-sessions/late night conversations that can be ALMOST as fun as a paper. The courtyard between Seafox and the Davis Village is also an ideal place to hang out and chat if the weather is good. Speaking of weather. We have a saying in Maine: "If ya don' like the weathah, wait a moment". Weather really does change on a dime, and it can be thick fog in the morning and burning sun by noon. Snow has been recorded in literally every month of the year, but August is notorious for some of our loveliest weather. We encourage you to always have plenty of layers of clothing on hand and plenty of sunscreen. Your conference registration includes breakfast and Lunch Weds, Thurs, Fri and Sat. and the Lobster Banquet Saturday evening. Breakfasts and lunches are in Take A Break, next to the Gates Center. For folks going on the Friday Pelagic Trip (you should all be there) there will be a "box Breakfast" available to eat on the boat, as we will be leaving from the dock downtown very early. We will be back in time for lunch.

While you are here, don't forget to take some time to enjoy Acadia National Park –the best "back yard" a college could have! Free shuttle buses pass by the Whale Skull in front of the Dorr Museum every 20 minutes or so and loop all over the island. Enjoy!

With best wishes

John Anderson and Kate Shlepr for the Local Committee

Message from the Scientific Program Committee

Putting together a scientific program for a meeting is a rewarding experience, as oral papers and poster presentations are submitted over the months prior to the deadline and the committee is the first to get a glance at the hard efforts of student and professional scientists over recent years and their polished results. The program comes together slowly as Plenary speakers and Symposia are suggested, invitations submitted and the order of the program decided. After organizing the plenaries and symposia, the contributed papers, across a range of topics in Waterbird biology are fit into the schedule, in as logical an order as possible. The final product should function to enlighten participants, perhaps give them ideas for their own research, flush out common themes, help participants to understand important topics in waterbird conservation and biology, and introduce researchers with similar interests. We hope that this program does all of that.

Members of the Waterbird Society are largely practitioners of conservation science. We think that the symposia on Offshore Wind Power and Birds, Updates on Loon Ecology and Conservation, and Recent Advances in Cormorant Conservation and Management will serve as key professional development activities for those practitioners. The symposia on Behavior and Conservation will also serve in this way, using aspects of animal behavior to make key conservation connections. For those who straddle the line between basic research and conservation, the symposia on The Biology of the American Oystercatcher and its accompanying plenary, and the symposium on Aquatic Passerines: The Youngest Waterbirds (a Waterbird Society first) will provide new insights into all aspects of waterbird biology. Contributed sessions on Conservation, Demography and Waterbird Movements and much more, will provide the audience with an array of talks using long-term data sets, sophisticated tracking, diet and habitat assessment technologies, and more, to elucidate a picture of a discipline on the cutting edge and contributing broadly to the general practise of ecological science. The poster session is just the right size, allowing everyone a chance to read and interact with those who used their creative talents to put together the important messages in a way that attracts attention and provides the key information at the same time: a most challenging task!

This meeting includes **119 contributed presentations (29 posters, 90 papers)** and within those contributions a whopping 344 co-authors. This speaks to the highly collaborative nature of science today and also to the way that contributors have looked beyond single location studies and attempted to synthesize. We would like to thank all who had a hand in making this program a success, including, most importantly, those who proposed and organized Symposia, and those who submitted oral papers and poster presentations. Finally, a big thanks to the three plenary speakers for agreeing to provide all meeting participants with our morning food for thought: the bigger ideas that we need to move forward in our discipline. Listen, and ask questions! Get the most out of your meeting experience. We will see you in the lecture halls!

The Scientific Program Committee

Erica Nol, Chair
Chip Weseloh
John Anderson

INTRODUCING THE PLENARY SPEAKERS

Wednesday: Bruno Ens. Sovon Dutch Centre for Field Ornithology


Biography Bruno J. Ens

Because I failed to convince my mentor, the late Rudi Drent, that fiddler crabs were the ideal study species, my scientific career has become tightly linked to the study of career decisions and competition among shorebirds, most notably the Oystercatcher. Supervised by John Goss-Custard and John Krebs, I studied interference among Oystercatchers during the nonbreeding season in the estuary of the Exe, UK. In 1992, I finished my PhD thesis "The Social Prisoner: causes and consequences of variation in reproductive success of the Oystercatcher" at the University of Groningen in the Netherlands under the supervision of Rudi Drent. I then moved to the Dutch island Texel to join the Research Institute for Nature Management (RIN), headed by Wim Wolff, to study the impact of climate change on shorebird populations. Due to fusions and privatization, the name of the institute changed from RIN to IBN-DLO to Alterra to IMARES. Throughout this period, I was involved in applied ecology, studying human impacts, like shellfish fishery, soil subsidence due to gas extraction, disturbance, climate change etc. on shorebird populations. Because I strongly believe that the dynamics of populations must be understood from the behaviour of individuals, I also remained heavily committed to keep the Oystercatcher population study on Schiermonnikoog running. In 2006, I moved to Sovon Dutch Centre for Field Ornithology, which is dedicated to organizing bird monitoring by large networks of volunteers, i.e. citizen science. At present, I am engaged in major projects to restore mussel beds in the Dutch Wadden Sea, as well

as developing an integrated monitoring network for this unique area, recently assigned as a world heritage site. Occasionally, I sneak off to tropical countries to study the risk-taking behaviour of crabs

Abstract: The contribution of long-term studies of Oystercatchers to science and conservation

The behavioural choices of individuals, like recruitment, risk-taking and feeding of nestlings, determine demographic rates and thus population processes. At the same time, the costs and benefits of particular behavioural choices depend on these population processes. It is from this Darwinian perspective that I have been studying the behavioural ecology and population dynamics of Eurasian Oystercatchers *Haematopus ostralegus* for the last 35 years. The Oystercatcher is a very good study species because it is a large bird living in an open habitat where it feeds on relatively large prey that can be monitored with little effort. The birds are easily marked and their high site fidelity allows the social career of individuals to be followed throughout their lives. However, the longevity of the species (it may live over 40 years) means that it requires perseverance to obtain the necessary measurements, i.e. keep the population study running. During winter, individuals compete for food. During summer, individuals compete for high quality territories and high quality mates. We understand much about the social career during the breeding season and the social career during the nonbreeding season, but we know very little about how these two careers are linked.

As I now see it, the aim is to unify three partial descriptions of Oystercatcher society in terms of competition, each accompanied by their own body of theory:

1. Distribution theories describe the access of individual animals to limiting resources in space
2. Life-history theory describes the access of individual animals to limiting resources in the course of their life, and how these resources are allocated to survival and reproduction
3. Mating systems theory describes the access of individual animals to partners as a resource limiting reproduction.

The queue model, which postulates a trade-off for nonbreeders between settling at an early age in a poor quality territory and at a later age in a high quality territory, links distribution theory to life-history theory. The initial queue model, where it was assumed that there were no major differences between individuals was proven wrong: chicks from high quality territories have a much higher chance to recruit into high quality territories compared to chicks from low quality territories. This silver-spoon effect has a long-term impact on fitness that increases over generations.

A major challenge to our current efforts to further improve the queue model is that the world is changing. The long-term population study on Schiermonnikoog shows that the expected increase in mean winter temperature will halt the current population decline, as does the expected decrease in variability in temperature. However, changing wind patterns have led to an increase in the risk of flooding during the breeding season, which offsets the expected benefit of warmer winters. Our long-term population is not the only one in decline: nearly everywhere in the Netherlands wintering and breeding populations are declining at an alarming rate since the late 1980s. A multitude of causes have been identified. In summer these include agricultural intensification (inland breeding populations), increased flooding during the breeding season (saltmarsh breeding populations) and increased predation (mainland saltmarshes). In winter, when all birds depend on tidal flats, these include: shellfish fishery, erosion of tidal flats (Oosterschelde) and colonization of mussel beds by the introduced Pacific oyster. Our aim is to construct a metapopulation model to assess the relative contribution and cumulative impact of all these factors on the population decline. For this, we rely heavily on citizen science, where we initiated volunteers to set up colour marking programs throughout the Netherlands, and developed a website where volunteer observers could input their observations of colour-marked individuals.

Thursday: Bill Montevecchi, Memorial University of Newfoundland

Biography: Dr. William Montevecchi

Bill Montevecchi leads an interdisciplinary research program on the behavior and ecology of marine and terrestrial birds at Memorial University. His research goal is improved understanding and protection of avian biodiversity and terrestrial and ocean ecosystems.
He has more than 350 publications, including Newfoundland Birds: Exploitation, Study, Conservation (1987, Harvard University) written with the late Les Tuck. He is a Science Advisor for Natural Sciences and Engineering Research Council, the US National Science Foundation, Bird Studies Canada, the Biodiversity Research Institute (Maine), the Wilderness and Ecological Reserves and Species Status Committees of Newfoundland and Labrador, and is Chair of the Sandy Pond Alliance to Protect Canadian Waters. He has served as Board of Directors of Nature Canada and the Nature Conservancy [Atlantic].

Abstract: Big Oil, Big Ocean, Big Questions

Public transparency and environmental information are prerequisite for citizen awareness and understanding and for conservation considerations. Yet, in the world's oceans, restricted, filtered and distorted information from multi-national hydro-carbon corporations and developmentally-conflicted regulatory regimes preclude adequate assessment of seabird mortality, platform pollution and disturbance. Lack of public environmental information creates Type II Error scenarios in which no information is interpreted as no problem, when in fact there is simply no information, or worse distorted information. In the northwestern Atlantic Ocean, the Newfoundland Labrador Offshore Petroleum Board prevents access to environmental information which the public and independent scientists should be entitled. Examples of these design failures and information distortion will be presented with recommendations for improved seabird monitoring, research and marine conservation.

Saturday: Jennifer Arnold and Stephen Oswald, Pennsylvania State University (Berks campus)

Biography: Jennifer Arnold and Steve Oswald

Jennifer Arnold is an Associate Professor and Steve Oswald is a Visiting Professor both at the Berks Campus of Penn State University. Jennifer has been studying waterbirds, particularly common terns, for over 20 years. Her research on avian population dynamics and life history is framed to advance management and conservation initiatives. In 1999, she was awarded a year-long, Sea Grant Knauss Marine Policy Fellowship. Graduating with her Ph.D. on Common Tern life-histories from the University of Massachusetts in 2002, she then moved to Auburn University where she studied population dynamics of Alaskan waterbirds in relation to energy development. In 2005, she was awarded the Alexander von Humboldt Fellowship to further her investigation of common tern life histories with work in northern Germany. Prior to taking up her current position, she also worked at USGS Patuxent Wildlife Research Center developing quantitative approaches to jeopardy assessments under the Endangered Species Act and as Seabird Program Director for the American Bird Conservancy in Washington, DC. Steve has worked with waterbirds since 1998, specializing in the thermal implications of climate change and analytical and field techniques. First working with terns on the Farne Islands, UK, and

Abrolhos Islands, Western Australia, he graduated with a Masters from University of Aberdeen in 1999 and received a grant from the British Ecological Society to study terns in Cape Cod in 2001. He was awarded a Ph.D. from the University of Leeds, UK, in 2005 for his work on the effects of climate change on Great Skuas and other high latitude seabirds. Following this, he collaborated with Jennifer on studies of Common Terns in Germany and worked as a consultant for EA Engineering, Science and Technology on a variety avian and ecotoxicological projects before moving to Penn State in 2007.

At Penn State, Jennifer and Steve have combined their expertise to examine the ecology of declining inland Common Tern populations and influence management approaches and policy decisions for this species in Canada and the US. Their broad research program, which focuses on training undergraduate researchers, includes comparative, interregional studies in ecology and demography, waterbird management techniques, and the development of tools to advance waterbird research. Jennifer and Steve have also consulted on several projects with potential seabird impacts including the Cape Wind Energy Project and Deepwater Horizon Oil Spill. They have approximately 30 peer-reviewed publications, mainly joint; have given over 75 academic presentations; and have written numerous technical reports and white papers on waterbird ecology.

Abstract: Interregional comparisons of Common Tern (*Sterna hirundo*) ecology and life history: The tools, the data, and implications for conservation and management

Jennifer M. Arnold and Stephen A. Oswald, Division of Science, Penn State University, Berks Campus, jma25@psu.edu, sao10@psu.edu
Motivated by declining populations in the North American Great Lakes, we have intensively studied breeding colonies of Common Terns in Lake Ontario and across the region since 2008. Discovering unanticipated differences in ecology and life history of species at inland colonies, we also undertook studies of regional population genetics and pioneered an expedition to assess the status and ecology of supposed large inland populations in the lakes of Manitoba. Here we report comparative ecological and demographic studies between Common Terns nesting in inland North America and those from coastal colonies of North America and Europe. We present novel findings for age at first reproduction, population structure, condition-specific survival, breeding success, chick development, habitat selection, and responses to heat stress, disease, predation and human disturbance. In the process, we detail a range of novel and remote field technology for waterbird research that we developed to minimize researcher disturbance and obtain difficult-to-get data. These include automated perches for resighting of banded birds without need for trapping or handling, leg-mounted temperature sensors to quantify thermal stress and behavior at the microhabitat level, and nest-based temperature and heart-rate monitors to elucidate the behavioral and physiological impacts of disturbance. Our results are put in the context of appropriate conservation strategies and how management approaches can and should be tailored to account for site specific differences and intraspecific variability across regions.

Thursday evening: Steve Kress, National Audubon Society

Abstract: Restoring Endangered Seabirds: Lessons From Maine Puffins And Terns

Dr. Stephen Kress, Director of National Audubon Society's Seabird Restoration Program, will review how techniques developed on Maine islands have led to the restoration of puffins and terns to historic nesting islands in the Gulf of Maine. He will also share how 'social attraction' and seabird translocation have helped to restore seabird colonies that have declined due to a wide range of human-induced threats. His talk will share recent success with restoring populations of several endangered seabirds including Bermuda Petrel, Short-tailed Albatross in Japan and Chinese Crested Terns. A book signing will follow the talk.

DAILY SCHEDULE FOR SCIENTIFIC PROGRAM WATERBIRD SOCIETY, BAR HARBOR, MAINE, 11-15 August 2015

Note that the names of presenting authors only, are listed in the program. Full citations of oral and poster presentations are included in the Abstract pdf available on-line.

TUESDAY AUGUST 11, 2015		
Activity	***Time***	***Place***
Registration	**2:00-6:00**	**Great Hall of Turrets**
American Oystercatcher Working Group	**9:00-5:00**	**Gates Center**
WbS council meeting	**8:00-5:00**	**Seafox Dining Room**
Social hour/Mixer	**7:00-10:00 pm**	**Great Hall of Turrets**

WEDNESDAY 12 AUGUST 2015

8:15	Welcome, Announcements and Introductions.		
8:35	**Plenary 1- Dr. Bruno Ens. *The contribution of long-term studies of Oystercatchers to science and conservation. Gates Center***		
9:30	**COFFEE BREAK**		
Time	**Gates Center**	**Gower Room (Turrets)**	**McCormick Lecture Hall**
10:00	**Symposium: *Biology of the American Oystercatcher*** **A. Management. Chair: Ted Simons** **The American Oystercatcher Working Group - Fifteen years of collaborative focal species research and management.** Ted Simons	**Symposium: *Aquatic Passerines: The Youngest Waterbirds*.** **Chair: Kate Ruskin** **Introduction. Latitudinal Trends in Saltmarsh Sparrow (*Ammodramus caudacutus*) Fecundity across its Global Range.** Kate Ruskin*	**Contributed Paper Session: *Waterbird movements*** **Chair: Dave Moore** **Foraging Areas and Movements of Great Shearwaters in the Gulf of Maine and Bay of Fundy.** Kevin Powers
10:20	**An adaptive management approach to enhancing American oystercatcher productivity on the Georgia coast.** Joanna Hatt.	**Tidal restrictions drive specialist avifaunal collapse in northeastern tidal marshes.** Maureen Correll*	**Geolocators Reveal Migratory Patterns of Arctic Terns Nesting in Maine.** Linda Welch
10:40	**Managing native predators to protect nesting shorebirds: Evidence from an experimental removal of raccoons on the Outer Banks of North Carolina.** Jessica Stocking	**Effects of tamarisk (*Tamarix* spp) biocontrol and removal on riparian breeding bird species of the Colorado Plateau.** Abigail Darrah	**First satellite tracks of the endangered Black-capped Petrel.** Yvan Satgé
11:00	**Potential techniques for increasing American Oystercatcher hatch success through shell rake enhancement.** Brandon Noel	**Acadian Flycatcher response to deteriorating Eastern Hemlock conditions in two hemlock-dominated riparian habitats in Northeastern Pennsylvania** Megan Napoli*	**Movement and survivorship of Reddish Egrets across their range: an analysis of long-term banding data from 1930-2014.** M. Clay Green
11:20	**B. Habitat use. Chair: Susan Heath** **Importance and function of foraging and roost habitat for wintering American Oystercatchers.** Janell Brush	**Using an aquatic passerine to assess mercury and other trace element exposure in the Upper Midwest, USA.** Chris Custer	**Understanding the migration patterns and non-breeding distribution of Great Lakes Common Terns (*Sterna hirundo*) using geolocators.** David Moore

11:40	**Using satellite and digital VHF telemetry to estimate length of stay, home ranges, and habitat use of American Oystercatchers in coastal Massachusetts.** Pamela Loring	**Using Louisiana Waterthrush (*Parkesia motacilla*) and Aquatic Insect Metrics to Gauge Productivity in Two Eastern Hemlock Habitats.** Katie Barnes	**Dispersal, migration and wintering areas of juvenile Great Egrets marked in Ontario** D.V. Chip Weseloh
12:00	**LUNCH**		
12:50	***AMOY symposium continued.*** **Shorebirds monitored in selected sites in Laguna Madre, Tamaulipas, México.** Alfredo Alvarez	**Aquatic Passerines continued. Differential predicted response of two salt marsh specialists to sea level rise: is the indicator species concept useful?** Elizabeth Hunter*	**Contributed Paper Session: *Demography and foraging*** **Chair: David Shealer** **Recruitment demographics and philopatry of Black Terns in Wisconsin.** David Shealer
1:10	**American Oystercatcher site fidelity in Cape Romain region of South Carolina.** Felicia Sanders	**Salt marsh passerine occupancy and habitat associations in northeast Florida.** Amy Schwartzer	**Variation in Green Heron nesting success in coastal Louisiana marshes**. Katie Percy
1:30	**C. Population monitoring: Chair: Pamela Denmon** **Exploring differences in survival and site-fidelity between migratory and non-migratory populations of American Oystercatchers.** Sean Murphy	**Contributed Paper Session 3. *Conservation* 1** **Chair: Scott Demers** **Distribution, status, and conservation of flamingo populations in South America.** Felicity Arengo	**Breeding biology and conservation status of the Socotra Cormorant in the United Arab Emirates.** Sabir Muzaffar
1:50	**Managing American Oystercatcher population growth by targeting nesting season vital rates.** Shilo Felton	**Ecology of wintering Piping Plovers in coastal Louisiana .** Jessica Schulz*	**Variation in Brown Pelican energy provisioning rates across a range of juvenile forage fish availability.** Juliet Lamb*
2:10	**A conceptual ecological model for Western Gulf American Oystercatcher productivity.** Sue Heath	**Creating High-tide Refuge Habitat for the Endangered California Ridgway's Rail.** Scott Demers	**Ecological segregation between two closely related species: exploring Atlantic Puffin and Razorbill foraging hotspots.** Stephanie Symons*

2:30	**Survival rates and population dynamics of American Oystercatchers in Virginia.** Alex Wilke	**Shorebird use of wetlands and aquaculture ponds in the Mississippi Alluvial Valley and Gulf Coast region.** Justyn Foth*	**Comparative foraging behavior of Masked Boobies and Red-footed Boobies breeding in the Gulf of Mexico.** Caroline Poli
2:50	**D. Distribution. Chair: Felicia Sanders Population and conservation status of the Pacific American Oystercatcher.** Eduardo Palacios	**Use of a dynamic occupancy model to evaluate secretive marsh bird response to wetland management practices during spring migration.** Evan Hill*	**Is food currently a limiting factor for gulls nesting in the outer Bay of Fundy?** Katherine Shlepr*
3:10	**Abundance and distribution of American Oystercatchers during the breeding season in North Carolina.** Sara Schweitzer	**Loon productivity and site fidelity in the Greater Kejimkujik Ecosystem** Amanda Lavers	**Effects of low level exposure to oil on hematological parameters and reproductive success in Common Terns.** Ian Nisbet
3:30	**Coffee break**		
3:50	**Abundance, habitat use, and geographic origin of non-breeding oystercatchers in North Carolina**. Lindsay Addison	**Habitat creation for waterbirds in southeast Florida** Ricardo Zambrano	**Bird-crocodilian interactions as a keystone interaction supporting nesting wading birds in tropical and subtropical wetlands**. Peter Frederick
4:10	**Non-breeding abundance, distribution and habitat use by American Oystercatcher in Sinaloa, México.** Miriam Lerma	**Changes in nest site selection and colony distribution on Great Duck Island, Maine.** John Anderson	**Does what you eat dictate what infects you? Bird diet groups and their parasites.** Kate Sheehan*
4:30	**Predicting American Oystercatcher breeding distribution in an urbanized coastal ecosystem using maximum entropy modeling.** Tom Virzi	**Non-breeding habitat use of reintroduced Whooping Cranes (Grus americana) in the southeastern United States** Hilary Thompson*	
4:50	**Wrap-up. Future Directions.** Pamela Denmon		

7:30 PM Special Presentation and Book Signing : Dr. Steven Kress. Project Puffin. Gates Center

THURSDAY 13 AUGUST 2015

8:30	**Plenary 2 - Dr. Bill Montevecchi. *Big Oil, Big Oceans, Big Questions*. *Gates Center***	
9:30	**COFFEE BREAK**	
	Gates Center	**Mc Cormick Lecture Hall**
10:00	**Symposium: *Recent advances in biology and management of Double-crested Cormorants*** **Chairs: Chip Weseloh, Linda Wires, Susan Elbin** ***A. Population status and new research*** **Monitoring and Status of the Western Population of Double-crested Cormorants**. Michelle McDowell	**Symposium: *Behavior and Conservation*** **Chair: Brian Palestis.** **Introduction and rationale for symposium** Brian Palestis
10:20	**Population status of Double-crested Cormorants on the Great Lakes.** Francie Cuthbert.	**Use of artificial habitat islands for rails & influence of behaviour.** Cory Overton
10:40	**Population trends of Double-crested Cormorants on the Atlantic Coast**. Susan B. Elbin	**It's all happening here: Prospecting and settling as behavioral mechanisms to assess prospects of successful breeding.** Peter Becker
11:00	**Using satellite telemetry to predict dispersal of Double-crested Cormorants following habitat reduction at the largest breeding colony in North America**. Adam G. Peck-Richardson.	**Migratory connectivity in Semipalmated Sandpipers: Implications for Conservation.** David Mizrahi
11:20	**Regional patterns in impacts of Double-crested Cormorant (*Phalacrocorax auritus*) population growth and management on co-nesting waterbirds in the US Great Lakes** Katherine Wyman*	**Fitting highly individual migration pathways of Black Tern, Arctic Tern and Purple Heron into conservation policy**. Jan van der Winden
11:40	**Where did the yellow perch go? Analysis of Double-crested Cormorant consumption in Saginaw Bay, Lake Huron.** Robin DeBruyne	**Evaluating species and habitat associations in a marine bird community, using shipboard and digital video aerial surveys on the Atlantic Continental** Holly Goyert
12:00	**LUNCH (Students and Mentors please go in first & eat at designated tables)**	
1:30	**Federal regulations and the model of cormorant management in the Eastern U.S.: the need for knowledge-based solutions**. Linda Wires	**Factors affecting the abundance of wading birds in the intertidal zone: are freshwater models applicable?** Dale Gawlik

1:50	***B. Knowledge-based challenges for cormorant management*** **Challenges for quantifying the benefits to fisheries of cormorant management and population control**. Don Lyons	**Shorebird hunting in the Caribbean and Northern South America.** Brad Andres
2:10	**Cormorants and ESA-listed salmonids in the Columbia River estuary: the management conundrum.** Daniel Roby	**Quantifying the effects of disturbance on staging Roseate Terns (*Sterna dougallii*) on the Cape Cod National Seashore.** Melissa Althouse *
2:30	**A Summary of Double-crested Cormorant Research in the Beaver Archipelago (2000-2015) Highlighting a Disconnect between Science and Management Practices.** Nancy Seefelt.	**Human activity, avian sensitivity and conservation.** Joanna Burger
2:50	***C. Ethical, bird conservation and other perspectives on cormorant management*** **Novel non-lethal approaches to managing fisheries-cormorant conflicts.** Yasuko Suzuki	**Discussion and Wrap-up**
3:10	**COFFEE BREAK**	
3:30	**Managing fisheries-cormorant conflicts in the Pacific Flyway: Perspective from a bird conservation NGO.** Stanley Senner	**Contributed Paper Session. *Waterbird breeding and habitat use*** **Chair: Lianne Koczur** A **sliding scale of habitat specialization in tidal marsh birds of the Northeastern United States** Maureen Correll*
3:50	**Non-traditional management of the largest Great Lakes cormorant colony in Toronto, Canada.** Karen MacDonald	**Spatial relationships between fledge success and habitat of American Oystercatchers on Fisherman Island National Wildlife Refuge, Virginia, USA.** Amanda Hackney
4:10	**Cormorants and conservation ethics: targeting one species to benefit another**. Michael Paul Nelson	**The influence of plumage coloration on nesting behavior in Reddish Egrets**. Rebecca Bracken*
4:30	**Essential social, cultural and legal perspectives on cormorant-fisheries conflicts: the European approach.** David N Carss	**Breeding ecology of the Reddish Egret in Texas**. Lianne Koczur*
4:50	**Symposium Wrap-up and Panel Discussion** Chip Weseloh and Susan Elbin	
6:00-8:30	**Poster session. Gates Center. Cash Bar and Snacks**	

FRIDAY 14 AUGUST 2015: FIELD TRIP DAY

All marine field trips are subject to weather so we will be keeping you posted as the day approaches as to the status of any trip. People going on **the Pelagic Field Trip** will need to assemble at the Bar Harbor Whale Watch dock (1 West St) at 0600 on Friday and the boat will depart at 0630 with or without you. We hope to be back by approx. 11:30. Before leaving for the dock you will need to collect your "box breakfast" from Take-A-Break. The boat has coffee & snacks available for sale once we are under way. The dock is approximately 1 mile from campus (just go south on Eden St, take the first Left on West St. and go to the end. Bar Harbor Whale Watch will be on your left). We will have a shuttle leaving from the Whale Skull starting at 5:45 am. People with cars will be able to park on the town pier (3 hour parking from 9 am on so we should be back in plenty of time for you to avoid getting a ticket). **YOU SHOULD BRING:** Layers of clothing (it can be brisk off-shore) Binoculars. Camera. Any useful whale & seabird calling amulets you possess. A good attitude. We can't ever promise anything, but we hope to be getting out deep (weather permitting) and August on the water is a major reason why we wanted to have the meeting here. If you bought a ticket on-line, make sure we have included it in your registration packet. If you weren't able to do this, we can sell you a ticket at the Registration desk. The trip is $40, which is a great deal thanks to the patronage of Bar Harbor Whale Watch.

Daily Bay trips (1 hour/ $10) will leave from the COA dock (down slope behind Take-A-Break) at 0630 on Weds Thurs and Sat (if there is interest) & get you back in time to grab a bite to eat before plenaries. These will be a loop around parts of Frenchman Bay On the College's boat the *Osprey,* and will give you a chance to see cormorant and gull islands, probably Bald Eagles, and Mount Desert Island (MDI) from the water. Tickets available at Registration. Minimum of 5 people for a trip to go, max of 20 people per trip. T**he Sunday Great Duck Trip** will leave from the COA dock at 0900 & we hope to be back no later than 1500. This trip is very dependent on landing conditions (we have no dock on Great Duck) but will be a chance to see nesting Leach's Storm petrels, Guillemots, and gulls. Bring a hat. We will feed you a picnic lunch on the island. **Friday After Lunch** You are on your own. The Local Committee team will have suggestions for possible hikes around MDI. Also if there is enough interest we can schedule terrestrial "birding" trips on MDI & perhaps a late-afternoon Bay trip on *Osprey*. Sign up at the Registration Desk.

SATURDAY 15 AUGUST 2015

8:30	**Plenary 3. Drs. Jennifer Arnold and Stephen Oswald.** ***Inter-regional comparisons of Common Tern (Sterna hirundo) ecology and life history: The tools, the data, and implications for conservation and management*** **Gates Center**	
9:30	**COFFEE BREAK**	
	Gates Center	**McCormick Lecture Hall**
10:00	**Symposium:** ***Offshore wind power and birds*** **Chairs: Wing Goodale and Iain Stenhouse** **Introduction.**	**Symposium:** ***Updates on Loon ecology and conservation*** **Chair: Jim Paruk** **Effects of the Deepwater Horizon: Blood PAH Concentrations change signature over time and are associated with reduced body mass in juvenile Common Loons.** Jim Paruk
10:20	**Tracking Seabird Migration and Foraging Ecology in the Gulf of Maine.** Linda Welch	**How loons swim: a high-speed, underwater view.** Glenna Clifton*
10:40	**Weather and time of day influence post-breeding movements of Common Terns.** Pam Loring *	**Breeding locations, migration routes, and staging areas of Red-throated Loons (*Gavia stellata*) wintering in the Mid-Atlantic region.** Carrie. E. Gray and Andrew Gilbert
11:00	**Developing a spatially-explicit approach for the conservation of marine birds: pre-construction planning of offshore wind developments for the Rhode Island Ocean Special Area Management Plan (SAMP).** Peter Paton	**Mitigation guidelines for loons on hydropower lakes.** Danielle Dauria
11:20	**Avian densities, movements, and habitat use across spatial and temporal scales on the mid-Atlantic Continental Shelf (USA)** Kathryn Williams	**Perceived fighting ability, not territory stability, as communicated by territorial signals of resident males may influence territorial intrusions by prospecting Common Loons.** Jay Mager
11:40	**Applications of a model-based U.S. Atlantic coast-wide synthesis of at-sea marine bird distributions to ocean energy spatial planning** Brian P. Kinlan	**Gavia CSI: the importance of looking at dead loons.** Mark Pokras

12:00	**LUNCH**	
1:30	**Using state-space modeling to identify areas of persistent winter activity and their associated environmental conditions in Northern Gannets.** Evan Adams	***Contributed paper session. Shorebird migration.*** **Chair: Caz Taylor** **Shorebird use of wetlands and aquaculture ponds in the Mississippi Alluvial Valley and Gulf Coast region.** Justyn Foth
1:50	**Discussion and Wrap-up**	**Habitat variation in density and refueling rates of three Calidrid sandpipers during spring migration on the Northern Gulf of Mexico.** Jessica Henkel*
2:10		**Phenological mismatch in Hop, Skip and Jump Migrants: a theoretical approach.** Caz Taylor
2:30		**Migration speed of Western Sandpipers from Panama to Alaska.** Pat Baird
2:50	**COFFEE BREAK**	
3:15-4:30	**Annual General Meeting: Waterbirds Society, Gates Center**	
Banquet: 5:30 Cash Bar, 6:30 Dinner, Gates Center		

POSTER SESSION (THURSDAY 5-7 pm, Gates Center)

	TITLES
1	**Models of Northern Gannet at-sea distribution in Canadian waters using the GeoAviR R package.** Francois Boldoc
2	**Climate-related challenges to the reproductive success of the King Rail.** Amanda Clauser*
3	**GIS analysis and modeling of Galveston Bay Rookery Island Erosion Risk along the GIWW.** Amanda Hackney
4	**Black Rail occupancy and abundance in Texas.** James Tolliver*
5	**Beach Restoration at Southern Seven Mile Island, Cape May County, NJ.** Nellie Tsipoura
6	**The effects of haying on wet-meadow birds at Baca National Wildlife Refuge, Colorado.** Scott Dieni
7	**Nest site selection of Dunlin near Churchill, Manitoba in a changing environment.** Gillian Holmes*
8	**American Oystercatcher (*Haematopus palliatus*) nesting in urban estuaries: Role in population recovery** Trocki, Carol L.
9	**Species distribution models for Black Rail populations in Texas.** Amanda Moore*
10	**Common Tern nesting behavior and colony disturbance on a natural island in Northern Lake Michigan.** Blake Cahill
11	**Poised on the brink: A comprehensive evaluation of Bermudian Common Terns.** Patrica Szczys
12	**A spatiotemporal assessment of Reddish Egret (*Egretta rufescens*) foraging habitat in the Laguna Madre, Texas.** Lianne Koczur*
13	**Expanding the Seabird Ecological Assessment Network (SEANET) into the Southeastern United States: Lessons learned.** John Stanton
14	**Double-crested Cormorant tree nesting habitat modification and impacts on invasive European Fire Ants.** Aditi Gupta
15	**Recruitment demographics and philopatry of Black Terns in Wisconsin.** Golya Shakrokhi*****
16	**Roseate Tern (*Sterna dougallii*) population decline: The case for prey base competition with Grey Seal (*Halichoerus grypus*).** Katharine Parsons

17	**Spatial variation in polycyclic aromatic hydrocarbon exposure in Barrow's Goldeneye in coastal British Columbia** Megan Willie*
18	**Novel technique to estimate site-specific nesting habitat selection criteria for Piping Plovers and American Oystercatchers.** Kathryn Spear
19	**Should I stay or should I go? Conservation implications of individual variation in Brown Pelican migratory strategies** Juliet Lamb*
20	**Decision support population modeling for Atlantic Coast Piping Plover recovery: 2015 field season.** Abigail Darrah
21	**Black Rail occupancy and abundance in Texas** James Tolliver
22	**Nesting effort of Least Bittern (*Ixobrychus exilis*) on publicly managed wetlands in Missouri.** Evan B. Hill*
23	**Dispersal patterns and habitat use of Brown Pelicans (*Pelecanus occidentalis*) along the US Atlantic Coast** Caroline Poli
24	**Use of game cameras in monitoring Leach's Storm Petrel** Rachel Karesh*
25	**The use of game cameras to monitor Black Skimmer colonies in Texas** Owen Fitzsimmons
26	**Increased distance to open water reduces nest success of Black Terns in areas under predation risk by Great-horned Owls** Valerie von Zuben
27	**Unexpected breeding season dynamics of persistent organic pollutants in Arctic Terns .** Christine Anderson*
28	**Breeding biology of the Black Guillemot (*Cepphus grylle*)** Meaghan Lyon*
29	**Health assessment of Tree Swallow nestlings from the Great Lakes: A terrestrial model for evaluating contaminated aquatic ecosystems.** Tom Custer

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Kate Shlepr
Lindsey Nielsen
Meaghan Lyon
Rachel Karesh
Nina Duggan
Audra McTague
Brenna Castro-Thews
Ite Sullivan

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