

American Oystercatcher Working Group Annual Meeting

November 15-17, 2016

Wachapreague, Virginia

Meeting Notes

(each presenter [unless noted] provided a PowerPoint presentation; these notes supplement each presentation rather than providing all information on the slides)

TUESDAY NOVEMBER 15

State updates: high level overview of current AMOY related activities from Atlantic and Gulf Coast states – presented by individual state representatives

Massachusetts – Kathy Parsons:

- Kathy presented AMOY breeding data collected by Mass. Audubon staff and cooperating partners, which included # pairs; # sites; # clutches and hatching %; fledging rates.
- She also offered banding and resight information and spatial distribution. She did not report on Boston Harbor pairs, although they are increasing in number and representing a greater percentage of the statewide population.
- Sites with at least 3 pairs, on 9 sites encompassing 30 miles of habitat, and spaced regularly apart had a high fledge rate (1.32 fledge/pair) in 2016. All other monitored sites fledged at a lower rate.
- Mgt. Index: Kathy created a Management Index that reflected productivity relative to mgt. activity. She found that sites with a higher mgt. index had more successful pairs. Predator removal and beach closure seemed to be factors that had the greatest positive impact.
- Question/Answer: reduced predator risk through control efforts seems to help productivity, as does more posting and additional protection measures from human activities. Shiloh noted that AMOY nesting activity occurs as far north as Nova Scotia but in low numbers (e.g., only 8 prs. in Maine). The population increase in MA is real, but probably affected by increased surveying too. No roof nesting has been documented in the state.

New Jersey – Todd Pover

- Only monitoring beach strand areas; marshes are not being monitored. Todd presented # pairs and sites from 2003-2016 (see figure in presentation). There is an upward trend in breeding pairs, although it is unclear what is driving the increase. It may be due to movement from different areas (such as marshes) to the beaches. For example, the NJ marshes are experiencing more frequent inundation which may drive pairs from the marshes to the beaches. Intensity of monitoring increased slightly starting in 2009, so some of the increase in breeding pairs during this period

of time may also be an artifact of effort. The last statewide estimate was in 2009 which yielded about 400 pairs. Since 2009, more sites have been detected (from low 20s in 2009 to low 30s now). NJ has stopped intensive banding, but may resume at some level in the future. In 2015 and 2016, they banded 11 and 22 juvenile birds, respectively.

- Table: 2003-2016 data. Hatch and fledge rates have increased since 2009. Fledge rate is ~0.49 so almost 0.50 fledge/pr.
- Real increase in pairs on barrier islands or just a shift? Would like to do a statewide survey but may not have the resources to complete one. NJ would be interested in participating in a range-wide survey if resources become available.
- For NJ, AMOY is not a top-of-list of species of concern. Instead, the state is doubling-down on Piping Plovers. However, the state recognizes the need to continue involvement with AMOY WG, but there is some concern that AMOY may negatively impact Piping Plovers (prey on; take habitat from), and would like to study this concern.
- Questions/Answers: The increase in pairs may have also been due to increased predator mgt., or that there were fewer flooding events since Hurricane Sandy. The number of sites monitored increased by only one so the overall increase in number of pairs was real, but it remains unclear what caused the increase

New York – Shiloh Schulte (for Susan Elbin)

- Audubon NYC, NPS, & NYC Parks are involved with AMOY monitoring
- Long Island and Jamaica Bay areas are surveyed
- The AMOY is considered a predatory species in NY, especially on Piping Plovers
- Have done some banding so now get updates on banded birds
- Monitored 65 pairs in 2016 and had ~70% productivity

Maine (reported by Shiloh) – 5 pairs, 1 chick per pair

Connecticut (reported by Shiloh) – monitoring efforts are occurring in CT, but Shiloh didn't have numbers at the time of the meeting.

Rhode Island (reported by Shiloh) – The state engaged in AMOY work for 2 years, mostly surveys and not a lot of management.

Maryland – Dave Brinker

- 30 miles of ocean coast line, half in Ocean City and the other half on Assateague Island National Seashore (AINS)
- AINS provides decent nesting habitat, but there are disturbance issues such as ORVs and other human uses
- Chesapeake Bay Islands have some nesting activity, but these sites do not get monitored regularly.
- The first work on AMOYs was done 30 years ago in conjunction with field books and the

MD Breeding Bird Atlas (BBA)

- A second statewide survey was completed in 2003 for the 2nd BBA and this work is published
- MD experienced a breeding population increase between 1973 and 2003
- MD would like to conduct another statewide survey in 2018 in conjunction with 2018 colonial waterbird survey
- AMOYs have been monitored routinely on Assateague Island by AINS staff in conjunction with Piping Plover monitoring since 2005; 15-20 pairs along the AINS beach; productivity from 0.5 to 1.5 fl/pr.
- The North end of Assateague Island doesn't allow ORV traffic.
- Need to examine AINS-owned marsh islands because they likely have some AMOY nesting there; the current focus is on the beaches due to need to examine effects of human activities
- MD has not started to apply coded color bands, but did apply some stainless steel bands in 1980s and 1990s. MD may apply Virginia color bands (black with white engraved codes) in the future.
- There may be some AMOY pairs nesting on rooftops in Ocean City.
- There are approximately 100 – 150 pairs nesting on non-traditional sites.

Virginia – Alex Wilke

- Many partners involved in AMOY work in VA
- Since 2000, the barrier island breeding population increased by 73% based on annual surveys conducted along the barrier island chain.
- Three coastal plain surveys have been completed at 5-year intervals since 2003. The next is scheduled for 2018. The most recent survey completed in 2013 yielded a total of 730 pairs
- Productivity monitoring occurs annually on the barrier islands and at a few marshes in the seaside lagoon system. Islands in the eastern half of the Chesapeake get monitored for productivity periodically (2009 – 2011 and again in 2015). In 2015, 50% of state's pairs (365 pairs at 16 sites) were examined to estimate productivity
- Winter surveys have been conducted since 1999, but starting in 2003, they have been carried out in a more systematic fashion following established boat routes that cover all known high tide roosts over a period of a few days (snap shot of numbers in winter). From 2010 to 2014, the winter population ranged from 2,018 to 2,903 birds. In 2015, a total of 3,610 birds were counted. This increase may have due to warm temperatures that kept more birds in the state than in previous years.
- Banding and resighting – have been banding intensively from 2004-2013; now banding opportunistically; plan to repeat statewide resighting in the winter of 2016.
- Management activities for AMOYs and other beach nesting species include posting signs, symbolic fencing, education, research, and predator mgt. (The VA partnership meets twice a year to determine predator management needs and coordinate predator removal efforts).

- AMOY nesting occurs both on the Chesapeake Bay Bridge and Tunnel and the Hampton Roads Bridge and Tunnel. The managing entities of both bridge and tunnels allow AMOYs and other nesting species to be monitored and managed
- Questions and Answers: any banding of winter AMOY? Only limited banding at winter roosts. Most of the banding effort has focused on banding chicks. Loss of marsh system habitat is very noticeable and likely will continue as time goes on and sea level rise increases. During breeding season, there seems to be an increase in number of nonbreeding individuals present, which would be expected as productivity increases along with loss of habitat. Thus, more birds appear to be waiting for nesting sites to open. There is a need to survey the lagoon system more intensively to detect these nonbreeding individuals. Winter roost sites are used consistently and many secondary roosts are used at extreme high tide; some new roosts are found periodically, but mostly the birds exhibit high site fidelity at existing sites.

Mexico – Eduardo Palacios

- Baja California Sur (BCS) – there are several protected areas and lagoons; sampled ~82% of the population; 523 AMOY counted.
- Sonora – an NGO collected data on AMOY but only at 2 plots where 340 AMOYs were counted
- Sinaloa – the most important area for AMOY and Bahia de Santa Maria is most important site in the area (2 islands) – 1,263 AMOY in this area; sampled about 30% of population. All in protected area.
- Nayarit – only 42 AMOYs counted, but the nesting population consists of 27 pairs
- Table: In 2009, population was 2,286 AMOY
- Other activities: predators (coyotes worse impact than ravens); vegetation mgt. (FONATUR; asked to let dredged-material island be bare, with less vegetation); Citizen Science (worked with fishermen to get data on presence of AMOY)
- Info to gov't agencies – AMOY is resident in Mexico and the government is more inclined to spend funds on nest and habitat protection for resident species versus migratory species.
- Next Steps or Wish List: population monitoring on a larger scale, including islands; focus on reducing human disturbance (including free-ranging dogs; tourists); Research (winter ecology especially establishing boat routes around islands to assess winter roosts).
- Questions and answers: On Pacific side, the Black Oystercatcher (BLOY) overlaps with AMOY (about 100 BLOY); Volunteer network includes 20-30 individuals managed by Eduardo and his colleague; they also work on Gull-billed Terns and Snowy Plovers. Tourists and fisherman disturb AMOY on islands, especially cruise ships taking people on smaller boats to nesting islands and surrounding waters to snorkel.

North Carolina – Sara Schweitzer

- NCWRC and partners surveyed the 500 km+ coastal area for AMOY during May and June 2016 (8-week survey window)
- Survey protocol followed standardized methods agreed-upon by AMOY WG (Ruth

Boettcher led this effort); however, some partners did not follow protocol (e.g., NPS, USFWS, USMC); their data were added to total pair counts because they surveyed AMOY for productivity estimates throughout the breeding season

- 10 plots were identified as productivity plots; thus, the number of pairs was known (the true value); these plots were surveyed by 3 naïve observers and these data will be used to obtain a detection probability. Plots represented barrier, natural (in river, sound, or estuary), and dredged-material islands; thus, there will be a detection probability for each habitat type.
- 136 plots were surveyed, each within 1.5-hr of high tide. Recorded known and presumed nesting pairs, as well as unpaired AMOY
- 435 AMOY pairs were recorded; most were on barrier islands, second greatest number on natural islands, and least number of pairs on dredged-material islands. This distribution of pairs may be an artifact of suitable habitat area by island type; this question will be investigated further.
- Most pairs on barrier islands were within federal agency managed sites; followed by state agency, Audubon NC, and private.
- Most AMOY pairs on dredged-material islands were under Audubon NC management; followed by state agency, federal agency, and private.
- On natural islands in rivers, sounds, and estuaries, most AMOY pairs were on those managed by Audubon NC; followed by state agency, private, and federal agency
- The number of AMOY pairs increased in the southern management zones, with no pairs detected in the most northern zone (from Nags Head to Va. Border)
- Management efforts that benefit AMOY include posting to provide a buffer between AMOY nesting pairs and human activities, outreach and engagement via Volunteer Stewards Groups, & predator management. Additional work needs to enhance foraging habitat and to protect eroding islands. NCWRC & Audubon NC request dredged-material for man-made islands by keeping in constant contact with the COE. NCWRC and Audubon NC have worked with NC Coastal Federation to create living shorelines that will stop erosion and build-up islands.

South Carolina – Felicia Sanders

- Considerable impact from tourists in the Charleston area; many boats accessing the islands so they're not protected as well anymore.
- Posting signs is a big portion of the work being done to protect nests and nesting areas along with considerable outreach. SC DNR posts 36 sites mostly for the benefit of AMOYs.
- SC DNR is able to close islands down to low tide line with new legal agreements between the state and individual landowners that have to be renewed every 5 years. Unfortunately, it is a complicated process that must be done for each island.
- Eco-tours – SC DNR has no permitting process in place for eco-tourism businesses wishing to access coastal islands. Instead, it is working on a map to show eco-tour groups where not to go due to bird nesting and roosting. SC DNR is also reaching out to tourism associations and paddling groups to teach them where they can go and which

areas to avoid.

- Possible AMOY WG project: design a map showing zones of sensitive areas; this map can be shared with REI and other organizations that lead eco-tours.

Georgia – Tim Keyes

- GA DNR conducts aerial winter roost surveys followed by boat surveys. – They counted 918 birds in 2016. In 2016-2017, DNR staff will do more intensive winter surveys of banded birds.
- The 2016 breeding survey yielded 120 pairs. The breeding population has been increasing in last 15 years. Breeding monitoring effort ranges from intense to low frequency. GA participated in the 2015 and 2016 repeated multi-state survey effort. Coyote control increased productivity on Little St. Simons Island and Cumberland Island National Seashore. Predator control at these sites are focused on reducing sea turtle nest predation, but birds are benefiting.
- Tim presented productivity estimates by site for 2016. Extreme high tides of 9 ft or more are becoming more common in recent years and definitely contributed to low productivity in 2016. Normal high tides range from 6-8 ft. in GA.
- Flooding is becoming a persistent problem, especially on shell rakes. Unfortunately, storm over wash doesn't impact predator populations.
- In 2015, productivity was pretty good and met the AMOY Recovery Business Plan's productivity goal of 0.50 fledged yng/per pair. The highest productivity in 2015 occurred on offshore bars due to the lack of over-wash events.
- Banding – replaced old bands and banded unfledged young in 2016. Overall, 123 AMOYs were banded in 2016. A bow net is used to catch adults on nests.
- Migration and winter band resight – Using NFWF funds, GA DNR contracted with VA Tech to conduct monthly resighting surveys in three sound systems. Over 1000 re-sights of 260 individuals so far.

Florida – Janell Brush

- FL has a very large shoreline and FL Shorebird Alliance (FSA) has helped survey 100s of miles of the shoreline.
- The Shorebird Program helps post signs and provides stewardship at key nesting sites. It also publishes a newsletter and maintains a shorebird database. Approximately 600 people enter information in the database.
- Summary Stats – 180 pairs statewide; has remained stable; number one cause of loss is over wash; second is predation.
- Cross Florida Barge Canal Spoil Islands near Crystal River are made of limestone. These limestone piles have high AMOY nesting effort, but low productivity. Hurr. Hermine changed the islands significantly. The plan is to examine AMOY responses to these changes.
- Hide-tide Roost Surveys – Big Bend – consistent winter roost surveys by Pat and Doris Leary.
- Importance and function of foraging and roost habitat for AMOY – Brush et al. 2016

paper published in Estuaries and Coasts.

- Intertidal Oyster Reef Complex – many high tide roosts are used at night only; some have been restored with clam bags and lime stone. Biggest challenges are big storms. After Hurricane Hermine, much of habitat remained intact and some new sand is accreting.
- Future restoration projects on the horizon – RESTORE funds will be used for these projects.
- Expanded Shorebird Program – with significant funds from NFWF and other sources

Texas – Sue Heath via Pam Denmon

- Status of AMOY 2016 (1 slide)

Louisiana – Jessica Schultz via Shiloh Schulte

- Not much work done in LA, but there is a definite need to increase monitoring effort.
- Participated in repeated surveys in 2016, but nests were unsuccessful
- There is a substantial AMOY wintering population in LA
- Hard to get around in LA's coastal waters
- Hoping that oil spill recovery funds will be allocated toward more work on AMOYs in LA.

State of AMOY Report – Shiloh Schulte

- Shiloh provided a brief history of the AMOY WG with an overview of the AMOY recovery business plan (Productivity Goal: 0.5 fledg/pr/year) that covers the species' entire range
- Progress check – 35% of goals have been achieved in first 5 years; 93% of productivity goal has been achieved
- Population projections
- Conservation Strategies: Coordinated mgt., monitoring; conservation scale (850 miles of coastline managed; 1000 prs under active management); 30+ partners across Atlantic and Gulf states; federal, state, private support; and expanded international cooperation.
- Map of project locations; the map needs to be updated to include NW Mexico.
- 2016 productivity: a lot of variability, but birds in the NE did pretty well and birds in the SE did less well. The inverse has been observed in previous years. Productivity in 2016 was the lowest since the inception of the business plan, likely due to frequent storms and flooding events. Many pairs monitored and low productivity affects overall goal. From 2003-2008, population was declining; since 2009, and the implementation of the recovery initiative, the population has stabilized and productivity trend reflects fairly stable reproductive success despite annual fluctuations (around 0.5 fledg/pr/year).
- Population Trend: from winter aerial surveys – 2003 estimate vs. 2013 estimate, stable with a slight increase; models predicted a downward trend if no management had been conducted.
- Atlantic Flyway Shorebird Initiative (AFSI): Shiloh presented Conservation Outcomes, Goals, Strategies, etc.
- AFSI: Implementation Plan – Key strategies include managing and protecting habitat, minimizing predation impacts, reducing human disturbance, reducing shorebird hunting,

and other adult mortality impacts on population trends

- The AFSI also includes project performance monitoring and evaluation component
- AFSI funding landscape: major initiative for shorebird management and recovery; NFWF is the primary funding source. AMOY initiative is part of AFSI and therefore there is no longer a separate RFP specifically for AMOYs, which will present future challenges in determining annual management needs. All future proposals will have to be multi-agency collaborative projects. There is a Gulf Environmental Benefit Fund, administered by NFWF, for work along Gulf Coast
- 2018 Aerial Survey – NFWF interested in funding this survey. The Working Group has a year to work through the design. Shiloh will also include repeated breeding survey analyses in the winter survey proposal.
- Questions and Answers: Need 2 planes – one for Atlantic Coast and one for Gulf Coast; will conduct surveys in Jan. and Feb. 2018; try side-by-side calibration with the 2 observers in the plane so their counts are calibrated; ground-air surveys will be used to estimate observer bias (small flocks less likely to be seen from air); aerial counts will be conducted at high-probability sites along with a sampling of probable areas to refine error rate; ground surveys great for recording substrate of roost sites, collecting band resights, and obtaining adult to sub-adult ratios. Shiloh asked states to add ground survey time in their respective SWG grants. Shiloh will add a line in the AFSI grant for someone to analyze the data post-survey. Shiloh asked working group members who plan to participate in ground surveys to let him know what they would need to get the work done in one day [one high-tide roost survey] and what kind of match they will be able to provide (e.g., time, boat use, etc.).

Breeding Season Survey update – Ruth Boettcher

See slides of PPT for details to which these comments apply:

- Two over-arching objectives of a rangewide AMOY breeding survey
- Results from the 2013 repeated survey pilot study was published in the Condor in 2015 (Hostetter et al. 2015).
- 2013 pilot study: field surveys (overview)
- 2013 pilot study: analysis
- 2013 pilot study: Summary of Results (abundance estimates; detection probabilities; validation)
- Sit-back and Re-evaluate: decided to conduct expanded survey
- Post 2013 repeated survey refinements
- 2015 and 2016 pilot study participation
- Repeated survey effort, by US states, 2015 (table)
- Repeated survey effort by US states, 2016 (table)
- Repeated survey effort by Mexican states 2016 (table)
- Number of High, Med., and Low Density survey plots, by US states, 2015 and 2016 (table)
- Number of High, Med., and Low Density survey plots, by Mexican states, 2016 (table)
- Habitat types surveyed across US sample plots, 2015 and 2016 (table)

- Habitat types surveyed across Mexican states 2016 (table)
- Comparisons between abundance estimates and actual pair totals in VA, 2015 and 2016 (table)
- Comparisons between abundance estimates and actual pair totals in GA, 2015 (table)
- Comparisons between abundance estimates and actual pair totals in NC, 2015 and 2016 (table)
- Next steps for 2017 and beyond – seek funding for data analyses and perhaps a third field season

AMOY Best Management Practices (BMP) – Shiloh Schulte

- Original AMOY BMPs included predator management; human dimensions; coastline development and coastal engineering.
- Shiloh suggested holding off on AMOY BMPs given the development of BMPs under other funded initiatives (e.g., FL beach nesting bird plan, AFSI predator management project) and concerns about reinventing the wheel. That said, the Working Group could complete a manual for managers that focuses on AMOY if there is enough interest to do so.

Question and answer: Margo Zdravkovic has been contracted to develop BMPs for beach nesting birds; current draft includes 2 detailed documents 150 pages long; has been reviewed by Brad Winn, Felicia Sanders, and Brad Andres. The final version should be completed by late November 2016. The AMOY WG decided to assess the BMPs being prepared now and in the near future and from there determine if there is a need for an AMOY BMP manual.

Pam Denmon – AMOY Special Edition in Waterbirds

- It will probably be out in February 2017
- Authors will get proofs in early January; make edits; return to editors and Stephanie Jones
- Publication finances: \$7000 for page charges has been promised, but the total cost is \$8400, so we are in the red.

Shiloh Schulte -- International Outreach and Engagement

- Brazil is working toward initiating banding efforts and following the AMOY WG banding guidelines; Brazil is also interested in participating in other AMOY WG initiatives.
- Argentina (Patricia Gonzales) has been organizing AMOY monitoring and management on breeding islands; Shiloh will Skype with her and her ranger community to introduce them to the monitoring and management methods and protocols developed and implemented by AMOY WG
- Mexico – need to find additional funding for work in NW Mexico; AMOY is listed as endangered in MEX and it is a good indicator of the status of other beach nesters in MEX. Because AMOYs are charismatic, they engage the public and receive support from the government. MEX would like to continue doing repeated surveys; conduct an inventory of islands to see which are the greatest priority and in most need of BMPs;

identify winter roost sites to prioritize most important roost sites and establish survey routes to conduct systematic winter surveys.

- Pacific Americas Flyway Initiative – Eduardo is engaged in this initiative and can make the connection between AMOYs on the Atlantic coast with those on the Pacific coast.
- Funds for international travel have been very helpful in getting other countries involved with AMOY work.
- Banding database connection with MEX and Central America is underway. Lindsay Addison is working to include MEX and Central American countries in the database.

Lindsay Addison – Banding Database

Lindsay provided general database information (currently contains over 50,000 records) and information on reports provided by the public, which should be encouraged.

- How to Facilitate Data Checking: can go to WG web site and look under the banding and resighting menu, the research and monitoring menu, and other places on the site to learn which letters are excluded and other useful hints. The website is very useful resource for new technicians and others.
- When uploading large batches of records, can put them into an Excel file template provided by Lindsay
- Public Records: all submitted public records are reviewed by Lindsay before they are uploaded into database. About 50% of the reports have a photo attached, which is extremely helpful for proofing. Lindsay corrects locations if they are way off.
- Search Form: Observers get a lot of information back from the banding site after their sighting is affirmed.
- Find USFWS Band Number: if not entered, Lindsay can find the number from her database and connect the two (color band and USFWS band number).
- For birds that are being monitored closely, such as during the breeding season, only need to report initial sighting and final sighting of time period monitored and include information about the bird's behavior, any changes in the bird's status, and any other events in the notes field of database.
- Can the database become mobile friendly (viewed easily on a phone screen)? It has not been looked into yet. There is a difference between making the site useful in the field vs. an App. A lot of effort would need to be spent to make an App, but to make a web site mobile friendly, it would also require designer time and money. Need to find out more information about the possibilities. The cost for making an App may be between \$10,000 and \$15,000, but will investigate how much it may cost to make the band-database web site more smart phone and/or tablet accessible.
- See "historical banding information" on AMOY WG web site to help you determine code and color if you have questions.

WEDNESDAY NOVEMBER 16

AMOY WG Steering Committee Discussion led by Shiloh Schulte and Pam Denmon

Steering Committee was initiated at 2012 Cedar Key, FL meeting. The committee's responsibilities and structure can be found on the AMOY WG web site.

- Should there be more interaction with AFSI Executive Steering Committee? More interaction with those on Pac. Coast?

Recovery Campaign Coordinator responsibilities include:

- Facilitating communication and collaboration among AMOY WG partners
- Supporting development and implementation of new management and research projects designed to meet the goals of the AMOY business plan and others (see slide)

Discussion

- Suggestions for committee membership: ensure that there is student or early professional representation on the committee
- Some of the steering committee members have been on the SC since 2012 or longer; there is a real need to change membership

Accomplishments of Steering Committee

- Planning, organizing, and holding annual meetings
- Moving the high priority or action items and initiatives forward
- Reviewing gaps that haven't been addressed by AMOY WG
- Promoting and supporting participation from other countries

Steering committee performed most of its work through conference calls.

Results from Online Survey

- There is a need for better communication between the steering committee and AMOY WG members. The committee should communicate with the WG a minimum of 4 times per year.
- Most WG members are aware of the steering committee and its functions.
- Most members do not think the WG needs more structure
- Shiloh's responsibilities as the AMOY WG Coordinator are changing and he is focusing more time on the AFSI.
- Other members' involvement in WG initiatives is limited by funding availability. Shiloh talks with representatives from states with interest and provides them with materials, helps them write proposals for projects, gets them involved with others in their region, gets AMOY work inserted in their work plans as a WG initiative (e.g., USFWS Refuges; NPS NS's; etc.).
- Need to plan 2-5 yrs into the future – if coordinator position is dissolved, will the steering committee take over the position's responsibilities?

Recruiting new Committee members; min/max no? (slide) – discussion –

- Size of steering committee seems about right (not too cumbersome)

- Continue to add a person from the location where the annual meeting will be held.
- New, younger and/or early-career members would be helpful; need greater diversity
- Representation from more agencies and more parts of the range is needed.
- A nomination (self or asked) should populate the slate when forming the steering committee membership. If the slate is too large, may need to call for a vote.
- Ways to recruit new membership: outgoing person can nominate a person to take their place and/or send out an email to ask membership if they are interested in being on the steering committee
- The steering committee is a group of worker bees that takes responsibility for action items of Plan; others are asked to help as needed or if they are leading one of the WG initiatives.
- There is a need for Communication and Outreach to encourage new membership in the AMOY WG. Invite people to come to meetings to present their work (research, conservation, or management). This will increase the field of candidates for the steering committee.
- Develop a job description for steering committee members that includes how much will be devoted to the committee so others will know what serving on the committee will entail.
- Make sure the Listserv is up to date with the AMOY WG membership so communication will be optimized

Other Comments

- Members of steering committee need to keep actions on task and on time
- The steering committee needs to report regularly to the WG members
- Acknowledge steering committee members at each annual meeting
- The relaxed structure of the group is helpful and maintains flexibility
- Listserv – 160 current subscribers; about $\frac{3}{4}$ are added because they are interested in receiving information on banded birds
- After this meeting, a summary of this discussion will be sent out on the Listserv as an informational item and to see if nominations (self or asked) come in for the open positions on the steering committee
- Steering committee members serve for 2 years with the option to renew
- Discussion action items: The current Steering Committee -
 1. will refine the “job description” then ask for nominations (self or asked);
 2. will clearly state action items that will be accomplished in forthcoming years and provide a time line for each item;
 3. will ask WG members for new WG action items, ideas or initiatives;
 4. will send the job description to the Listserv and ask for nominations (self and others);
 5. will examine slate of nominees and select new members.

Future Directions and Priorities Discussion – led by Alex Wilke and Todd Pover (slide)

30 responses to the anonymous online survey

Summary of Survey answers

- Affiliation
- Important functions of WG
- Position Paper - targets a general audience to let others know why the group exists and formalizes what AMOY WG is all about
 - AMOY WG Position paper was originally drafted after the 2006 Cedar Key meeting as a way to formally outline the group's purpose and identity.
- Ranking of Goals and Objectives – likely affected by people's affiliation or professional responsibilities
- A discussion ensued on AMOY population & distribution goals
- Suggestions from meeting attendees: revise goal (or mission) of WG by deleting "Atlantic Coast"; adding information on Outreach and Education and Communication; and describing the WG as a collaborative group. Objectives should help achieve the mission or goal, and should be "SMART" objectives. The position paper should also include an Identity Statement in context of other single species WGs or multi-species WGs.

Discussion of what is missing (see slide of comments from the group and survey results)

- Outreach, Education – communications
- Links to multi-species groups or initiatives
- Integration of AMOY work with multi-species initiatives

Committee to address these and other suggestions generated by this discussion:

- Shilo Felton
- Todd Pover
- Alex Wilke
- Shiloh Schulte
- Kathy Parsons

Benefits of involvement in AMOY WG

- Survey results suggested the AMOY WG was still relevant and the meeting still valuable, even in light of increased focus of multi-species conservation and the logistic/time challenges of general vs. species-specific meetings (see slide).

Utility of Single Species WG or Initiative

- AFSI may be taking precedence over AMOY (single species) WG
- See slide
- Discussion of benefits and detriments of having a WG meeting in conjunction with other, larger meetings: cost may be an issue; location may prohibit or not attract some people; may attract people who otherwise wouldn't be at the WG meeting; may take away from WG identity, if combined with a larger meeting

Future priorities and directions (slide)

- Members ranked these ideas

New ideas (not from survey):

- Mapping of priority breeding and non-breeding sites throughout the range

- Coordinate full life cycle conservation across entire range
 - Predictive modeling of habitat availability, including climate change as an influential factor
 - Health (disease, toxicology)
 - How AMOY work integrates with, is an umbrella for, or is contrary to multi-species work.
 - Human Dimensions assessment of proposed management actions or research.
- Meeting attendees ranked new ideas using dots. A summary of these meeting attendees' preferences will be sent to AMOY WG by Committee (Shilo, Shiloh, Todd, Alex)

Shilo Felton et al. Behavioral and physiological responses of nesting AMOY to off-road vehicles on North Carolina's National Seashores

- See PPT presentation

Allison Anholt et al. Adding elevation: AMOY response to habitat enhancement projects in the marsh and on the beach in NJ

- See PPT presentation

Shilo Felton et al. – Hotspots of Productivity in NC

- See PPT
- Discussed where to allocate funds to make the best impact on AMOY populations

Shilo Felton -- Survey of people who are managing areas and monitoring AMOY (see PPT)

- Variables to consider that likely influence productivity

Shiloh Schulte and Janell Brush – Restoring Florida's Beach-nesting Birds

- See PPT
- Gulf Environmental Benefit Fund administered by NFWF
- Outcome-based, time-based plan needed
- Did receive funding (\$11 mill for the plan; 4-year program), 2017-2020 proposed work outlined
- Focuses on Breeding Season

Sara Schweitzer – NABCI and AFWA update

- The most recent North American Bird Conservation Initiative meeting was in August 2016 (there is a winter and summer meeting each year; next is in February 2017). Within NABCI, Committees work on policies and initiatives:
 - Private & Working Lands – developing a web site of all Land Trust Bird Conservation Initiatives for everyone's information and assistance;
 - Monitoring – prioritizing demographic data needs; national database development (e.g., via AKN) needs; and providing assistance and advice to other Committees in NABCI and Working Groups in AFWA's Bird Conservation Committee (BCC);
 - Communications – improving NABCI web site; providing stories for Centennial

- All-Bird Bulletin; will develop a blog; will assist other committees with their communication needs;
 - State of the Birds / Policy – will use synopsis from State of the Birds publications for “elevator speech” to and “ask” from policy advocates; goal is to influence bird-friendly policies. The 2016 State of the Birds report was a tri-national report (CAN, USA, MEX) that reinvigorated the tri-national NABCI partnerships. This committee will provide support for 5 key programs: NAWCA, NMBCA, State Wildlife Grants, Farm Bill, Joint Ventures.
 - Human Dimensions – secured 2 yrs of funding for a National Social Science Coordinator who will work from Va. Tech. with Dr. A. Dayer’s Human Dimensions program. Coordinator will develop a framework for incorporating social science into strategic habitat conservation and other bird conservation efforts.
- The most recent meeting of AFWA (Association of Fish and Wildlife Agencies) was in September, including a meeting of the BCC (Bird Conservation Committee) and its WGs. Updates were provided by:
 - the National Flyway Council (of importance to AMOY, they formed a Task Force on State Contributions to Canada that would increase focus on non-waterfowl spp. and other non-game spp., and coordinate with States’ Wildlife Action Plan objectives);
 - the USFWS (obtained supporting messages for Migratory Birds Division budget from BCC; will phase out 1-800- bands with web-based reporting; USFWS Refuges is integrating Human Dimensions into their work plans);
 - the PIF/Shorebird/Waterbird WG (formed a tri-national grassland bird ad hoc WG; recommended that 2017 State of the Birds report focus on grassland birds; formed a Feral & Free-ranging Cat ad hoc WG; will work with Avian Knowledge Network to develop webinars & workshops to move forward database management on a national scale)

Funding Initiatives – Pam Denmon

- Fund-Me “button” on an Audubon web site
- The process of bringing this about has to be worked out
- Approved to examine this option

Next Meeting, 2017

- Tim Keyes will host meeting in GA
- Gulf Coast in 2018

Wrap up

- Follow-up from Pam and Shiloh about structure of group
- Todd and Alex will follow-up with future priorities
- Shilo Felton – will collect survey sheets and follow with e-copy of the forms
- Winter Survey – Shiloh Schulte will work on planning and proposal for this work
- Initiate breeding Season data analysis – Ruth Boettcher will work with Shiloh Schulte to

plan this work

- Banding Database mobile possibilities – Lindsay Addison will evaluate best means of getting the database accessible by smart phone and/or tablets
- Fund raising possibilities
- La Paz Pacific Seabird Meeting in 2018