American Oystercatcher Working Group Annual Meeting
Nov 30 – Dec 3, 2021
Meeting Notes – Day 3

9:00 am to 9:10 am Introduction and orientation

9:10 am to 10:40 am

Session – Habitat restoration and enhancement

***Progress in 2021: Update from Habitat Subgroup- Tim Keyes (15 min.)**

-working group to increase capacity and learn from one another as we think about habitat creation

-sharing a template to gather case studies about successful or failed restoration projects. If anyone has input, please share

-12 projects have been shared to date, a variety of habitats for nesting mostly, but also foraging and roosting. Most projects had four, some up to 9 partners involved. Most completed projects were considered successful.

-Most projects cost and timing exceeded expectations, and most needed a full-time staff member to manage and coordinate among involved partners, PR, etc.

Questions:

-are there existing project databases? This could be very useful to help illustrate successes which will be useful for getting approval for new projects.

-Might want to include something about measures to protect from human disturbance in the template.

-Gulf Coast Joint Venture will be a good contact, USFWS for Texas, LA is Coastal Protection and Restoration Authority

-Existing databases- Amanda doesn't think that there is a multistate database, but there are some frameworks with NAWCA

Corresponding Chat Transcript:

09:26:30 From Abby Sterling, Manomet to Everyone:

A thought for something to add to the template- might be useful to include something in the monitoring about if there will need to be some measures to protect from human disturbance- monitoring, signage, stewarding, etc.

09:26:56 From Shiloh Schulte to Everyone:

yes that's right

09:27:09 From Todd Pover to Everyone:

Will photos or videos of projects summaries be included, if not that would obviously be helpful.

09:31:24 From Karis Ritenour to Everyone:

At least in LA, just about all of that work is being done by the Coastal Protection and Restoration Authority (https://coastal.la.gov/) so I would guess they have their own internal records

09:32:25 From Joseph Marchionno to Everyone:

In addition to sharing information on projects within this group, I think it's extremely useful to share information via peer-reviewed lit to the broader ecological and engineering sciences as there is a lot of overlap. I know that framing these projects in a research framework is difficult with certain funding mechanisms, but there are still many knowledge gaps in restoration ecology.

09:33:35 From Mike Molnar to Everyone:

I have a connection at Dept of Treasury that works with RESTORE Act. I'll see if they have something public facing.

09:35:36 From Lindsay Addison to Everyone:

Our District of the Corps (Wilmington) has an annual coordination meeting which can be kind of useful for staying up to date.

09:35:48 From A Hackney to Everyone:

This is the website for Texas RESTORE that has an inventory of funded projects. I'm not sure how up to date it will be though.

https://www.restorethetexascoast.org/

09:37:05 From Lindsay Addison to Everyone:

There is also this: https://www.sad.usace.army.mil/SACS/

***Vegetation succession, avian response, and habitat management following beneficial placement of dredged material in a coastal marsh area in New Jersey- Sam Collins**

-explored using beneficial use sediment to create a network of nesting areas, mimicking historic nesting sites where species are separated. Created habitat around Ring Island.

-Ring Island Elevated Nesting Habitat, about 1 acre, 6000 cy of dredged material, sandy sediment

-AMOY, LETE and BLSK used it first, then by the third nesting season additional species, high productivity for the first nesting season, but the lowest productivity by the third season because of lowered elevation.

-in 2017 more sand was added to the platform to increase elevation and to reduce vegetation. BLSK and others used it, but veg increased and Norway rats were observed.

-Vegetation mgmt. in 2019- avoided herbicide because of Diamond-back Terrapins. Used a 10% saltwater solution to experimentally treat during nesting season. Pre and post monitoring of vegetation. In 2019, salt spray reduced vegetation by the end of the nesting season, minimal disturbance to birds using back-pack sprayer and paired with monitoring.

-In 2020, the vegetation removal plans were altered due to Covid, burned prior and spreading salt directly on nesting habitat- Not effective.

-In 2021, did not burn but did try manual vegetation removal prior to nesting, then one site was doused with salt water and one was not. Salt water was effective, manual removal alone did not have an impact by the end of the nesting season.

-Without vegetation management, cover was over 50%. Manual removal does lower species abundance but not cover. Direct application of salt was not effective, but salt spraying was.

-By 2019 and 2021, there was no productivity due to mammalian predators. Rats were present throughout.

Questions:

- What are the long-term plans? Considering letting some succession take place for wading birds, but hog-peanut is a problem. Will consider using salt spray to open some areas for AMOY, BKSK, and terns, using back-pack sprayer. There is another elevated nesting habitats that hasn't been adopted by nesting birds, but it also doesn't have the problems with vegetation.
-Do you know what plants benefited from the burn? Tough to say, without the burn there was less golden rod and beach dune grass. The fire might have promoted hog-peanut, which was a problematic species.

Corresponding Chat Transcript:

09:52:36 From A Hackney to Everyone:

It would be interesting to see the vegetation response to broadcasting a granular salt-like the loose salt used for livestock. This could reduce your effort as well, reducing the multiple spray applications.

09:54:48 From Pam Denmon to Everyone:

Do you have an idea on which plants may have benefitted from the burn?

09:56:09 From Pam Denmon to Everyone:

And will you publish or write up for distribution?

09:56:21 From Ezra Thompson to Everyone:

Was the amount of salt applied comparable between granular vs. solution? Is there any speculation on why one granular salt was less successful compared with solution - maybe timing/amount differences or biological differences prohibiting vegetation growth? Thank you and very interesting topic!

09:57:06 From Susan Heath - Gulf Coast Bird Observatory to Everyone:

what was the spacing between salt solution spray application?

09:57:52 From A Hackney to Everyone:

Whoa, my bad, I missed the granular application slide during a coffee run to the kitchen!

09:58:36 From Audrey DeRose-Wilson to Everyone:

Very interesting presentation, Samantha! Did you have sandspur on any of your plots and do you know if this plant responded to the saltspray treatment?

10:01:34 From Brian Van Druten to Everyone:

Maybe look at a Rainbird sprinkler system for applying the salt water. Also look at pump foot valve screens and use a 5 gallon bucket with burlap over it to protect from sucking up trash on your intake.

10:02:24 From Pam Denmon to Everyone:

Thanks Sam-will you be doing any predator management in the future?

10:06:27 From Sam Collins to Everyone:

@Pam we absolutely plan to investigate the salt spray study further and hope to write it up/publish for distribution when we have a better idea of methods. Since methods were different between years it was a bit difficult to make comparisons between years so hopefully with another year conducting similar methods to 2021 we can make better conclusions about vegetation management efforts

10:07:01 From Pam Denmon to Everyone:

Thanks Sam!

10:11:14 From Sam Collins to Everyone:

@Ezra yes the amount of salt was comparable. We dumped >800lb of salt on the platform area in 2020 on two occasions. I think one of the reasons it may not have been as effective was that the frequency of treatment was not enough to make an impact. We did the initial 400lb placement at the start of the season, shortly after the burn when there was limited vegetation. The second placement was at the start of the nesting season (end of April) so it was really before the peak of the season. We did observe some signs that the vegetation was affected shortly after placement

10:12:54 From Sam Collins to Everyone:

@Susan the salt water treatment areas were >5m from control or manual removal areas

10:15:09 From Kris Vagos to Everyone:

Thank you, Sam. It would be really helpful to have more detail on the salt spray application and its efficacy. In general, it would be nice to have some type of treatment to reduce vegetation during the nesting season. I would love more details on the application method, especially in places (if any) where there were birds nesting e.g. were you able to spray the nests? As a tern colony manager, I am always looking for ways to open up habitat for the nesting terns - but having to control before and after the nesting season limits our ability to keep habitat open and vegetation short. Thanks again.

10:15:35 From Sam Collins to Everyone:

@Audrey we did have sandspur in our plots and they were impacted by the saltwater solution. Basically, the only species we observed that was pretty resistant to the saltwater solution was the beach dune grass. The beach dune grass was stunted by the spray but emerged throughout the treatment area

10:16:30 From Sam Collins to Everyone:

Thank you for the suggestion Brian! We are definitely open to ideas to apply the spray to a larger area

10:17:02 From Susan Heath - Gulf Coast Bird Observatory to Everyone:

Sam I was asking about how far apart the salt spray was done in time. Once a month, twice a month, every two weeks, or whatever

10:18:40 From Sam Collins to Everyone:

In 2021, we sprayed approximately every 2 weeks during the peak nesting season (mid April-end of June). In 2019, we sprayed on a weekly basis mid April - mid July

10:19:07 From Susan Heath - Gulf Coast Bird Observatory to Everyone:

ok thanks!

10:19:17 From Sam Collins to Everyone:

Frequency of spray is something want to investigate further as methods changed between years

10:19:33 From Audrey DeRose-Wilson to Everyone:

Thanks Sam! Sandspur and other veg management is of interested for some of our black skimmer colonies here in here in Florida. Very neat to see these results!

***Shorebird Restoration on Dead Neck Sampson's Island- Lyra Brennan**

-Historically this site was two islands, owned by Mass Audubon and Barnstable Clean Water Coalition, used by breeding PIPL, LETE and AMOY. Historically Roseate and Common Tern as well.
- Island is eroding at east end and accretion is occurring on the western tip, so the closing of the channel on the Cotuit Bay is a concern. Also, they are concerned with the increased risk of breaks in the mid part of the island.
-Restoration goals are to improve the habitat availability, improve reproductive success and share lessons learned.
-Currently, narrow beach with scarping, vegetation in higher areas, Sampson's tip prone to overwash, predation is also a risk with coyotes
-A previous restoration around 2000 resulted in significant increase in bird use, and over the next six years, numbers of pairs increased. Around 200,000 cy of sediment were applied.
-Removing habitat from the west tip of the island to redistribute across the island, even though this was PIPL habitat. Justified by increasing PIPL habitat on the other parts of the island. Yr 1- 44,200 cy removed, Yr2- 44,200 cy removed, Yr 3-45,200 cy removed. Basically, slicing sand and redistributing. Permitting was extensive including specific engineering plans like grade, engineering sketches to show goals with design, ground truthing in real time during sand moving process. Working closely with partners including Mass Audubon.
-Saw immediate use of AMOY nesting after the first year of restoration. Widening habitat, and knowing movement of sand will continue to widen the habitat over time with natural sediment shifting.
-Common terns nested in 2020, dramatic increase in LETE and PIPL by 2021. However, increases in predation from crows and coyote, and increase human disturbance. Implementing lethal control and electric fencing for predators, and outreach and education, patrolling for addressing disturbance.

-Also including invertebrate monitoring and predator monitoring, vegetation transects, to understand collateral changes as well. Other ecological benefits include increasing dune resiliency, slowed velocity of the channel through widening, increased tidal flow to Cotuit Bay to improve water quality, managing for Phragmites, and reducing the breaks in the island.
-Project was funded privately by local communities, increase community resilience.

Questions:

-invert monitoring- just did the analysis from 2019 so far, but did not see a decrease in the availability of inverts for birds from that first year of data. Happy to share more results soon.
-interested to hear about how it works to deposit sand with the idea that it will be a source and allow natural flow to redistribute sediment to balance erosion? Without a long-term management plan, it can be tricky to let sand move, but here there was a commitment to long-term maintenance and we also deposited sand at the top of dunes too, so it won't move as quickly.

Corresponding Chat Transcript:

10:21:56 From Erica Nol to Everyone:
Very interesting talk Lyra. Can you tell us more about the invertebrate results?
10:24:55 From Lindsay Addison to Elizabeth Colhoun(Direct Message):
Seems mildly analogous to possible placement on the north end of MB. If that happens ever.
10:25:33 From Erica Nol to Everyone:
Do you have an estimate of how much it cost?
10:27:55 From Lyra Brennan (Mass Audubon) to Everyone:
Yes--the entire project is estimated to be around 2million, not including continual maintenance
10:28:10 From Erica Nol to Everyone:
Thanks Lyra. An amazing effort.
10:28:40 From Lyra Brennan (Mass Audubon) to Everyone:
it's been very exciting to see the increased nesting-- we've learned a lot!
10:28:43 From Lindsay Addison to Tami Pearl(Direct Message):
Hey Tami! Feel free to ask your question in the chat, or well catch you in the discussion after the talks. :)
10:30:02 From Pam Denmon to Everyone:
Thanks Lyra. Would be great to see this written up too.

***Engineering Shorebird Habitat: Avenues for Optimism- Brad Winn (15 min. + Q&A)**

- We are seeing significant wide-spread habitat losses, intertidal zones have been neglected and eroding due to SLR and storms, need to work with coastal authorities to maintain, increase and protect intertidal habitats. We want to normalize the reuse of sediment to enhance and protect shorebird and seabird habitat. We are trying to get this folded in at a policy level and within the states.
-We are seeing increased acceleration in the declines of our long-distance migrants. We need to work with all coastal authorities toward incremental gains in habitat through a multi-agency and

partner effort. Conversations are ongoing, cross-pollination and working to address these threats through these efforts. Good feedback from USFWS in the Mid-Atlantic, working to infuse shorebird habitat creation, recreation and protection into agency decision-making.

Questions:

-Alex-Will the information from the meetings from the last few days be available so that partners that are interested can catch up? Yes, there was a recording from the first day, and there will also be notes and slides that will be available.

-Next steps? Currently building momentum with the USACE. Working state by state to increase the conversations and keep this moving forward. Mike added that bringing together all the information from the previous workshops, create tangible steps, and reach out to all partners.

Corresponding Chat Transcript:

10:41:21 From Erica Nol to Everyone:

What are next steps Brad?

10:40 am to 10:55 am Break

Tim receives AMOY Award!

10:55 am to 12:20 pm Session – Habitat continued

***Microhabitat characteristics associated with American Oystercatcher (*Haematopus palliatus*) nest-site selection on Atlantic coast sandy beaches- Joanna Grand and Erika Knight (15 min. + Q&A)**

-goal: inform beach restoration and the creation of dredge spoil islands to create ideal habitat characteristics for AMOY using nesting data.

-did not look at nest success vs failure, just nest presence. Elevation data used from lidar, used data from the same year, included 1349 nests, 25 sites, 7 states from 2011-2019. Recorded nest site characteristics, and compared those to random points at least 6 m from nests. Covariates included distance to high tide (MHHW and MHW), average width of intertidal zone (MHW to MSL), max elevation and SD and sinuosity of coast, maximum elevation of site and distance to the point, max and min elevation within 50 m of nest, average and SD of slope, terrain ruggedness within a 50 m buffer, categorical landform (flat, ridge, slope and swale) and distance to nearest landform feature.

-statistical approach was boosted regression trees to compare all nests and random sites. Also looked at regional differences between northern and southern sites split at Virginia. Looking at all sites, model performed relatively well, nest elevation was most important (12-15 feet), sinuosity (selecting straight shoreline), distance to max elevation (0; selecting highest point), distance to MHHW (peaks at 150-200ft, avoid 600 ft, then peaks at 800 ft) and average tidal width (prefer to nest at narrow intertidal zones.

-northern sites include CT, NY, NJ, model explained 40% of variation. Shoreline sinuosity (peaked at 0, average intertidal width (peaked at 1-2 feet), distance to max elevation, elevation (12-15 ft) and terrain ruggedness (low terrain ruggedness).

-southern sites (VA, NC, GA, FL) 30% of variation explained. Top five variables included nest elevation, distance to MHHW, distance to max elevation, sinuosity, and intertidal width (less than 20 feet)

-recommend elevation 12-15 ft above MSL and minimal shoreline sinuosity, distance to max elevation varies by region (100,000 feet in north and 25,000 ft in south), distance to MHHW is about 150-200 ft, and intertidal width varies by region 1-2 ft in the north, around 20 ft in the south, prefer flat terrain with low ruggedness.
-contact information: Erika.knight@audubon.org, joanna.grand@audubon.org

Questions:

-the intertidal difference between the north and south- could that be explained by the difference in tidal amplitudes? Yes, that likely has an influence.
-narrow nesting tidal zone and steeper and high dune beach area creates a narrow tidal zone. Distance to max elevation- what were you using as the highest point? Some beaches aren't that big. For an island that measure makes more sense that when you include mainland beaches, some of the numbers are much higher that is really relevant.
-across the huge range in the timing of the lidar, how did you determine your ability to measure intertidal zone width that are static but taken across a range of times. The lidar was collected within the same year of the nest data. When it was within the same year we made sure it wasn't impacted by hurricanes. The accuracy was fairly good, 1m distance resolution and 20 cm vertical error. The intertidal zone measurements- were those corrected for not knowing the tidal stage? A tossup for if we could measure the intertidal width depending on the when the lidar was collected, some nests don't have intertidal width.
-Could you measure slope with these data to inform designing an island? Slope was a variable we measured, but it didn't come out as a super important covariate- it came out more important in the south. It didn't explain a ton of variation, it's the eighth ranked variable. We could look at those figures at look at slope, and let you know.
-how were the sites divided by north and south- tried to keep sample size fairly consistent between regions, but we could play around more with dividing it in different ways, we could split by state too but the sample size really decreases. Lumping VA into the northern states would be simple to test.
-are there next steps for this project? Writing this up for publication, looking to role it out locally as well, we could let the AMOY WG to role out those results, a lot more we could do with this model and this analysis. Could easily add additional sites.
-we did account for multi-collinearity, removed variables that are highly correlated although model can handle some correlated variables.

Corresponding Chat Transcript:

1:11:38 From Emilio Tobon/NYCA to Everyone:
What kind of instrument did you use to measure elevation? great talk!
11:13:24 From Joanna Grand (she/her) to Everyone:
We used a lidar-derived DEM
11:13:35 From Emilio Tobon/NYCA to Everyone:
Thanks!
11:14:22 From Todd Pover to Everyone:
how did you define terrain "ruggedness"?
11:17:06 From Erika Knight to Everyone:

We used a ruggedness index calculation tool from Whitebox Tools, which uses a root-mean-square-deviation between a grid cell and its neighbors: https://www.whiteboxgeo.com/manual/wbt_book/available_tools/geomorphometric_analysis.html#RuggednessIndex

11:17:40 From Emma LeClerc to Everyone:

Thanks for the talk! Did you test for multicolinearity among the covariates?

11:17:55 From Brian Van Druten to Everyone:

Do you think we could run this on a wide scale to determine our potential nesting carrying capacity?

11:18:43 From Erica Nol to Everyone:

Were all data collected remotely?

11:20:39 From Katie Walker (she/her) to Everyone:

Interesting work! Thanks. Curious about the southern sites, where the model explained less variability than the northern model and encompass a far greater area than the Northern area...any thoughts on dividing this area further to see if selection differs within this southern group?

11:21:52 From Pam Denmon to Everyone:

@Katie...yes, I was also wondering how VA was selected for the southern group since it is often put in a northern group for other ecological purposes.

11:24:56 From Todd Pover to Everyone:

What's wrong with northern??? Haha

11:26:41 From Katie Walker (she/her) to Everyone:

Thanks!

***Panel discussion- Alex Wilke facilitator; Tim Keyes, Sam Collins, Joanna Grand, Mike Molnar, Lyra Brennan panelists**

Follow-up Question from presentations:

-To Sam: predator management as capacity allows. Using a pump would be disruptive during nesting season, so it would have to be pre or post nesting.

-Vegetation Management on Restoration Sites: Herbicide that Tim has used is aquatic rated herbicide with limited vertebrate interactions. Herbicide treatments have some concerning side-effects, sometimes skipping years. Looking for more information about how herbicides might interact with chicks. Amanda has a contact who might provide information.

- Matthew Anderson-FL- switched from Glyphosate to Salt Water 25-30 ppt salinity pumping. Does seem to keep the vegetation back as well as the herbicide. They are spraying it with a fire hose, but they were able to spray during nesting season because there are no nesting birds yet. But it lasted as long as herbicide.

David Carson- used gravel on top of sand to minimize vegetation.

Alex-do you roll in maintenance costs when you propose these projects? Tim had luck with having the ACE to uphold their initial agreement for maintenance that was part of the creation of a dredge island. Todd Pover acknowledged the maintenance up front but couldn't get funding

in advance, so it's an ongoing challenge. Goal is a long-term maintenance fund, but its still uncertain.

David Carson- we use volunteers to remove vegetation by hand.

Lyra- vegetation removal with AmeriCorps members. Also using some mechanical veg removal, but trying to balance that with keeping it small enough to avoid permitting issues.

Alex- leveraging volunteer time as match is a good idea.

Discussion

Lindsay- When planning for beneficial use or restoration, how do we balance or minimize impacts on coastal invertebrates? Mike: Time of year, making sure that inverts have time to recover. Lyra: there might be an impact on aquaculture. Sand flat foraging needs to be optimized as well. There are some plans to highlight multiple-use regulations and there are some funding opportunities under CZM. Alex: our coastal zone programs funded those historically- did we hear anything about that at the meetings recently? Mike: no, but some of the states are looking to revise and update those plans.

Shiloh: thinking through partnerships- a common theme even with other topics, building partnerships long term with USACE and other groups to build habitat. How do you get these conversations started, how do you maintain interest? Any successes with private landowners?

-Sam- developed the 7-mile Island Innovation Laboratory, which was a multi-partner group with USACE, stakeholders, universities to think about how sediment can be used to protect marsh from sea level rise. Not just elevated nesting habitats, also thin-layer placement strategies.

-Tim- GA had a meeting through Manomet and CSO to pull together all partners and stakeholders to get everyone in the same room. Convinced the DNR CRD Federal Regulation person about the value of bird island creation, she is the go-between with the state and the USACE. Creation of habitat became a state priority. There is also a cheerleader in the USACE who is running with it. Mike- getting non-traditional partners in the same room and making those connections is key. The Infrastructure Bill will create more opportunities to build those partnership, listing species benefits and highlighting other benefits can make it happen in a big way. Alex: getting the right people on the ground so they can see the projects and understand the benefits to create cheerleaders. Tim- we got lucky, there have been other partners like USACE in Jacksonville District and at King's Bay that have invited us to the table. Finding out that the USACE is dredging in advance has allowed us to take advantage of dredging plans with habitat creation and being part of steering committee to plan BU projects.

-Dave Carson- we were able to take advantage of partnerships in the FL Inland Navigation District and the USACE to let them empty filled disposal sites to create new habitats and islands. It's the low-cost option, and we are now in the loop and we are helping guide where the material goes.

-Todd- Some of it is luck, the key is getting them to go beyond their regulatory role, so we've taken partners out to band, see the sites to build those relationships. We've also held meetings with the state people to help them understand the needs, habitat value,

permits and regulations. We use these in-the-field 'show and tell' moments to show them why we need these habitats.

-Lyra- a strong and strategic communication plan is really important both internally and externally and to the community. The community outreach piece was important to highlight objectives and consistent messaging. This helps with routine maintenance in the future and creating future projects.

-Alex: Including a formal communication plan should go in the template as well.

-Kevin Holcomb: Working in the DelMarva, working with coastal programs, created a story map to highlight that work. Maintaining the partnerships is key, including the USACE and other stakeholders. Once these plans are in place, we need to format the project results and progress in a way that is easy for partners and stakeholders and funders to access. We need those partnerships to access, move and transport the material. The databases that are pulled into the action plans are driven by coastal groups to build the GIS and collect data. GIS StoryMap is the way forward.

Ruth-including the fisheries parameters means that we need lots of partnerships. Creating a database of projects and then talking through the issues with EFH and using a matrix to try to formalize some of those tradeoffs. **Ruth can share that matrix.**

Mike: connections between the USACE and the restoration practitioners is a great way to move projects forward and a key to getting things accomplished.

-Alex: how do we deal with shell rake restoration and permitting about activities that might technically take marsh away? Tim: by pitching projects as restoration rather than creation of new habitat we can get around some of those issues. Fisheries is more supportive of shell rake projects, Cindy Cook is the main contact for NMFS to talk about EFH.

Lindsay: got permitting to add shell to existing reefs, but it got a little tricky because some rakes were not on a shoreline. Working within existing footprints of historic shell rakes made the permitting easier, funding is still a challenge but the permitting was less difficult. Shell rakes also provide buffering to the marsh, so highlighting protection and benefit to the marsh can be a good strategy too.

Corresponding Chat Transcript:

11:41:11 From Lindsay Addison to Alex Wilke, The Nature Conservancy(Direct Message):

Question for Mike/Brad. Kind of related to habitat, or at least maintaining habitat quality, I'm curious how they are approaching the pros/cons of sand placement as regards benthic invertebrates, and what the latest thinking is on that topic, especially how to balance or minimize impacts.

11:42:19 From Lindsay Addison to Everyone:

Would love to hear how in-season saltwater applications are handled without impacting the nesting birds.

11:43:24 From A Hackney to Everyone:

Has there been any work using black plastic sheeting to smother vegetation? Would have to be removed prior to nesting season.

11:44:02 From Janet Thibault SCDNR to Everyone:

https://meridian.allenpress.com/herpetologica/article-abstract/77/1/45/462281/Effects-of-Salinity-on-Hatchling-Diamond-Backed?redirectedFrom=fulltext

11:47:08 From Pam Denmon to Everyone:

Thanks Janet. Interesting.

11:47:44 From A Hackney to Everyone:

Side note, but I recently read this paper for a class and thought having a similar write up for nesting island restoration would be AMAZING.

https://link.springer.com/article/10.1007/s12237-021-00920-7

11:48:49 From Lindsay Addison to Everyone:

Our herbicide work isn't supported by the Corps which created the islands years ago, but we partnered with habitat management staff at our state wildlife agency to bring an ATV with a 25-gal tank and spray system to the islands we treat. It works fine for a 4-acre area. The hope is that if we get more sand, at least for a little while, we won't need to do as much herbicide treatment.

11:49:37 From Kevin Holcomb to Everyone:

At a larger scale, to facilitate partnerships and share restoration design elements... our "local" outreach example is the Delmarva Restoration and Conservation Network. "DRCN consists of practitioners with years of collective experience in working with landowners, local governments, and others to prioritize, plan and implement large and small scale restoration and conservation projects on the Delmarva Peninsula." Our Story Map - https://fws.maps.arcgis.com/apps/MapJournal/index.html?appid=3428c79ce0ce49db8abb52a3e7df04c1

11:50:53 From Lindsay Addison to Everyone:

I don't suggest using hand pulling on Spartina patens! Too much roots. But other species are more susceptible.

12:01:12 From Janet Thibault SCDNR to Everyone:

For our newly restored Crab Bank in South Carolina, with partners, DNR established a fund called the Coastal Bird Conservation program under the Nongame and Natural Areas Trust Fund (SC Code of Laws §50-1-280). The program established a means for SCDNR and supporting organizations to collect donations to support the successful renourishment of Crab Bank, and because of Crab Bank, the program will continue to provide a funding mechanism to further support future coastal bird conservation efforts up and down the coast of South Carolina.

12:09:18 From Kevin Holcomb to Everyone:

Yes, as Todd (and others) mentioned, personal relationships with partner organizations is key for success... we are now working closely with USACE to use dredge material to build back-barrier platforms on the VA side of Assateague Island, Chincoteague NWR. Ongoing planning meetings are necessary to stay relevant.

12:14:27 From Lindsay Addison to Everyone:

I'd love to see more details about Kevin's project.

12:16:24 From Kevin Holcomb to Everyone:

I'm glad to share our plan and provide future updates.

12:17:19 From Lyra Brennan (Mass Audubon) to Everyone:

I think seeing Matrix would be very interesting Ruth!

12:17:40 From Tim Keyes to Everyone:

I agree Ruth - I would like to see it.

12:17:58 From Lindsay Addison to Alex Wilke, The Nature Conservancy(Direct Message):

Can we find out how Ruth and Kevin can best share their projects--email the list-serv? Something else?

12:20:56 From Ruth Boettcher to Everyone:

You shall receive!

12:26:27 From Todd Pover to Everyone:

Where we going to circle back to potential places to host the habitat summaries? Or is that for another day/down the road?

12:27:16 From Todd Pover to Everyone:

Alex - you may have said we need to research what's out there first?

12:28:37 From Lindsay Addison to Everyone:

We also have sites like Sam just mentioned--historic areas of placement that are now high(ish) marsh where there ne vegetation that waders nest in.

12:28:42 From Tim Keyes to Everyone:

The main suggestion at this point was a GIS story map.

12:30:27 From Lindsay Addison to Everyone:

There could be an advantage to having a site (like a StoryMay) that's bird-habitat-focused.

12:20 pm to 12:55 pm Session – Research and management presentations

***Predation management in Florida- Raya Pruner (15 min. + Q&A)**

- Predation mgmt. is a major component in shorebird management in FL, and is included in the Florida Shorebird Database. The FSA Breeding Bird Protocol requires the cause of loss for any monitored nest lost to be entered. Allows observer to record information at nest, and provides a searchable database to understand cause of nest lost.
- Cause of nest failure is important for adaptive management, gathering data from partners is done through engagement, training and increased monitoring to observe signs through game cameras, predator tracking, providing tracking guidance and teaching volunteers to document observations.
-Average 275 AMOY nests per year, can use the database to see exactly what impacts nesting success, and then use that information to make management decisions at the site and state level.
- Using this, FL makes regional plans to address predator management to increase productivity at the site level. More than 200 FSA partners monitor more than 300 routes per year. Important to confirm predator impacts through combining data with local knowledge. Assessing predation rates to determine if predation is the main threat. Determine if there is support and permission for management, and assess if there are independent resources. This creates several routes- through FSA, through USDA, or independent resources. Hired 5 predation management biologists who work with shorebird teams that are monitoring shorebirds and sea birds. Found that with in-house biologists site specific plans can be implemented, be proactive, and make impacts. Increases in capacity due to monitoring data that reduces uncertainty and improved

communication and results. Data collection has helped increase partnerships throughout coastal FL.

-Collaborative work in the northeastern part of the state, LAGU and Great Horned Owl were main predators, working with USDA to address this. Barge Canal had predator issues as well, but a management plan for the site was created and implemented. At Alligator Harbor managing perches resulted in increased success.

-Next steps: Reducing site specific threats can have larger implications, continuing to assess past and current strategies, evaluate management capacity and impacts, and continue work with partners.

Questions:

-Are you assigning values when you are going through decision making? What is the process? How do you define success? Number of predators removed or chicks fledged? Currently weighting is binary, but as we expand we are looking at including more factors. Success might vary based on the sites, but it's generally based on productivity success.

- How did you determine predators and are people actively entering this into the database? Entering the fate of the nest is required to put it in the database. It could be unknown, but there is a pick list. It's a combination for how people determine cause of nest failure- for some difficult sites we use game cameras, where we have avian predators it can be tricky. Focus on improving uncertainty in tracking and using cameras at difficult sites.

-The framework for where to devote resources is great to document what is needed, what outcomes are achieved, but how quickly does this adaptive framework work for implementing management? When we manage a site we are looking at proactive management, we coordinate and communicate on a regular basis between then shorebird biologists and the predator management staff. Sometimes the predator management staff and USDA might be focused on some emergency situations, but we do try to be proactive in our management.

-Is the predator guidance document available on the FSA website? Not yet, will let you know

-Is the public supportive of predator management? Tricky, we are working on how to best communicate predator management, but when we report about nests lost to predators, people want something done to protect the birds that nest on the beaches.

-It sounds like you've been able to include all the state biologists and managers? Yes and no, the FSA partners that do the monitoring come from a variety of backgrounds. There needs to be some level of education and outreach to get managers on board, so we continue to grow capacity there.

Corresponding Chat Transcript:

12:46:01 From Shiloh Schulte to Everyone:

Given the uncertainty in identifying sources of nest loss do you employ cameras or other methods to determine fate?

12:50:47 From Tim Keyes to Everyone:

Is the predator interpretation guidance on the FSA website?

12:52:26 From Tim Keyes to Everyone:

Has the public been supportive of predator management for beach nesting birds?