



Seabird Protection Network
Evaluation and Planning 2017-2018

Final Report

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EXECUTIVE SUMMARY

The Seabird Protection Network (SPN) is a collaboration of agencies, scientists and organizations coordinated by the Greater Farallones National Marine Sanctuary and the Greater Farallones Association. SPN engaged in an in-depth study in an effort to understand more about its key constituencies, particularly pilots, boaters, paddlers, and kayakers, in order to deepen its relationships with these constituents. SPN wanted to know about which messages resonate with pilots, boaters, paddlers, and kayakers; the most effective strategies and tactics to deliver the messages to them; and the most effective ways to build lasting partnerships with them.

The research included a preliminary analysis of SPN that focused on reviewing and analyzing 55 documents, including current and previous materials and evaluations about the Seabird Protection Network. The preliminary analysis was followed by stakeholder interviews and community conversations/focus groups in order to answer SPN's questions about messages that resonate, effective strategies to deliver the messages, and the most effective ways to build lasting partnerships. Nine stakeholder interviews were conducted. The community conversations/focus groups provided a significant opportunity to hear the perspectives of general aviation pilots (10 participants) and boaters/paddlers/kayakers (10 participants).

The following findings are central to understanding the interests and concerns of pilots, boaters, paddlers, and kayakers, as they relate to the Seabird Protection Network:

- Pilots, boaters, paddlers, and kayakers appreciate and value nature; they are receptive to SPN's messages about protecting birds.
- SPN's focus on education and outreach, with a positive approach, is very favorably received and highly appreciated.
- The primary barrier that would prevent pilots, boaters, paddlers, and kayakers from keeping their distance from nesting seabird colonies is a lack of knowledge and/or lack of understanding about the need to keep their distance and about specifically what areas to avoid.
- SPN's key constituencies are generally very interested in bird biology, especially bird behavior, bird identification, and nesting habits/seasonality.
- SPN's key constituencies are very interested in seeing images and data related to bird nesting behavior.
- Key phrases that resonate with SPN's constituencies are: protecting marine wildlife, flying the California coast, flying safely, and boating safely.

The following key recommendations, based on the key findings, are the top priority actions recommended for SPN to pursue in the short term. The recommendations address SPN's key questions.

Messages that Resonate

- Continue the current positive approach; continue to be friendly, encouraging, positive, and proactive in engaging the community.
- Review and revise the outreach presentation to incorporate the following:
 - Include data: illustrate the population numbers of seabirds historically and currently, data about the impact of being too close, i.e. how many eggs are being eaten and how many birds have been impacted, data about the outcome of avoidance measures.
 - Focus on specific ways pilots, boaters, paddlers, and kayakers can make a difference.
 - Include information about birds, species, nesting behaviors, habitats, etc.
 - Make the point that people can have a large impact on an entire breeding cycle.
 - Keep the message focused on what people can do. Don't focus on regulations.
 - Clearly identify what areas to avoid – and when to avoid them – on charts, maps, and apps.
 - Include images and videos of how birds behave and what they look like when they are disturbed. This will help pilots, boaters, paddlers, and kayakers know how to identify cues that a bird is disturbed or under stress. This is most effective when the images are from a plane (for pilots) or from the water (for boaters, paddlers, and kayakers.)

Communication Strategies

- Use images and videos in SPN's programs and links to websites.
- Work with airport management and harbor masters to place signs or placards at specific locations (airports, boat landings, boat launching areas, etc.) to alert people to the presence of nesting birds: "Caution: Birds in vicinity" or "Please stay away from nesting seabirds."
- Identify how SPN can add relevant information to the charts; the charts are the primary source of information for pilots. The FAA produces this data.
- Learn more about [ADS-B](#) (Automatic Dependent Surveillance-Broadcast), and begin to identify how SPN can work with the ADS-B. This will be required for all pilots in 2020.
- Learn more about the [California Boater Card](#) certificates from the California Division of Boating and Waterways and identify ways to make bird safety part of this certificate. This will be required for all boaters in 2021.

- Develop a laminated card with identification of the birds on one side, and the seasons and locations to avoid on the other side.
- Identify the various maps and apps to help boaters locate themselves on the water, and work with the companies to identify a way to make notations on the maps/apps.

Building Lasting Partnerships

- Continue to work closely with key stakeholders, including airport administrators and the Federal Aviation Administration Safety Team.
- Continue to communicate with focus group participants and key stakeholders to extend the relationships SPN is developing with them.
- Work with local clubs (e.g. Coastside Fishing Club, Bolinas Rod and Boat Club, Bodega Bay Fishermen, Tomales Bay Boaters Association, etc.) Give outreach presentations at the monthly meetings, and as SPN strengthens its relationships with each organization, work with them to identify additional opportunities, such as cross-linking with their websites and posting notices at strategic times.

This study provides guidance to the Seabird Protection Network as it continues in its efforts to communicate effectively with pilots, boaters, paddlers, and kayakers, and deepen its relationships with these constituencies.

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1. Introduction

1.1 Brief Background

The Seabird Protection Network (SPN) is a collaboration of agencies, scientists and organizations coordinated by the Greater Farallones National Marine Sanctuary and the Greater Farallones Association. They work to understand and reduce human disturbances to sensitive seabird colonies along the California coast, including from pilots and boaters that get too close. They accomplish this through partnering with boaters, paddlers, and kayakers, and organizations such as the a Federal Aviation Administration 's Safety Team and the Western Sea Kayakers Association on outreach products and presentations targeting the pilot and boating community with information about how to steer clear of seabirds. SPN seeks to deepen its relationships with key constituencies, particularly pilots, boaters, paddlers, and kayakers.

SPN has focused on these efforts for the past ten years, and the staff recognized the value in assessing where they are, and using this information to inform it as it moves into its next ten years. In addition, with staff changes in the past year, SPN recognized that 2017-2018 would be an opportune time to consider the future.

The primary questions that SPN staff wanted to address during this 2017-2018 evaluation and planning process were:

1. What **messages resonate** with pilots, boaters, paddlers, and kayakers? In other words, what primary messages should SPN incorporate in all outreach activities, that will most effectively help them accomplish their objectives?
2. What are the best/most effective strategies and tactics **to deliver** the messages to pilots, boaters, paddlers, and kayakers?
3. What are the best/most effective ways **to build lasting partnerships** with pilots, boaters, paddlers, and kayakers?

SPN's goal is to reduce human disturbances to nesting and roosting seabirds by working with specific audiences who are the main sources of human-caused disturbances (pilots, boaters, paddlers, and kayakers). They accomplish this through the following objectives:

- 1) **Communicate** the message that minimizing human disturbance of seabird populations is important, necessary for safety, desirable and the law

- 2) **Motivate (Partner with) pilots and boaters to acknowledge** that keeping their distance from seabird populations, especially nesting areas, is important, necessary for safety, desirable, and the law
- 3) **Motivate pilots and boaters to commit to keeping a specified distance** from seabird populations, especially near nesting areas. The specified distance is to fly **at or above** 1,000 feet above ground level (AGL), and for boaters to stay at least 1,000 feet away from seabird breeding colonies.
- 4) **Motivate pilots and boaters to actually keep their distance** from seabird populations, especially nesting areas. This will happen through pilots flying at or above 1,000 feet AGL; and boaters/paddlers/kayakers staying at least 1000 feet from seabird breeding colonies.
- 5) **Partner with** pilots, boaters, paddlers, and kayakers to spread the word.

1.2 Conducting the Research

SPN engaged consultant Margaret Kadoyama to work with the staff to develop and implement the evaluation plan. Early steps included conducting a preliminary analysis of SPN that focused on reviewing and analyzing current and previous materials and evaluations about the Seabird Protection Network. The preliminary analysis included a thorough review of all relevant material, especially the previous evaluations that have been conducted in recent years that address various aspects of SPN's programs. The results of the preliminary analysis guided the planning team in developing the primary questions to be addressed in the next phase. More than 55 documents were reviewed. The Preliminary Analysis is an important companion document for this report, and for that reason it is included as Appendix B. An additional set of ten documents, primarily focused on boaters, were reviewed subsequently.

After reviewing the preliminary analysis, SPN staff developed the primary questions that they wanted to address during this 2017-2018 evaluation and planning process, which is the focus of this report. These questions were the following:

1. What **messages resonate** with pilots, boaters, paddlers, and kayakers? What primary messages should SPN incorporate in all outreach activities that will most effectively help them accomplish their objectives?
2. What are the best/most effective strategies and tactics **to deliver** the messages to pilots, boaters, paddlers, and kayakers?

3. What are the best/most effective ways **to build lasting partnerships** with pilots, boaters, paddlers, and kayakers?

The most effective ways to begin to answer these questions were through stakeholder interviews and community conversations/focus groups. The planning team determined which stakeholders they wanted to hear from, and clarified the questions to ask in the interview process. The consultant conducted nine stakeholder interviews. (See listing of interviewees in Appendix A.) The community conversations/focus groups provided a significant opportunity to hear the perspectives of general aviation pilots and boaters/paddlers/kayakers and hear their thoughts and opinions on a variety of topics, including their immediate feedback on the outreach presentation, and in the case of boaters, on specific products that were developed to be useful to boaters, such as tide-books. See Appendix C for the focus group protocols.

In addition, SPN staff were interested in a more in-depth evaluation that focused on the outreach presentations that are presented to pilot clubs, boating clubs, and other organizations. SPN staff seek opportunities to connect with these groups and work with them. They also work with the Federal Aviation Administration (FAA) to partner with the FAA Safety Team (FAAST) to present at FAAST seminars. The outreach presentation was a primary area of focus for this evaluation. SPN had a number of questions specific to the outreach presentations, and the key stakeholders and focus group participants' perspectives were illuminating. During the planning process, SPN staff identified the following as desired outcomes of the outreach presentations:

- For audience members to feel that it is important to fly high/steer clear along the coast
- For audience members to spread the message about the importance of flying high/steering clear along the coast
- For audience members to feel that they can be partners with SPN – that they have a role in the protection of these birds

The process for this focused evaluation included observing two outreach presentations (one with the former outreach coordinator and one by the current outreach coordinator), running a mini-version of the outreach presentation during the focus groups to elicit specific feedback on the presentation itself, and refining the questions that are asked during the presentation using the Qwizdom handheld devices.

This report includes a focus on ways to build relationships with priority audiences, in order to more fully connect with and involve them. It is also informed by Community Based Social Marketing (CBSM), a process that is directly relevant to SPN's goals and objectives. CBSM is

used to influence voluntary behavior to benefit individuals or society. See the Preliminary Analysis (Page 6 in Appendix B) for more information about CBSM. The recommendations in this report also include suggestions for ongoing evaluation of the outreach presentation. See Appendix D for more detail.

2. Key Findings

Key stakeholders and focus group participants often made the point that pilots, boaters, paddlers, and kayakers appreciate nature and that SPN's messages about protecting birds will find a receptive audience.

1.1 Awareness of SPN and its Message

The awareness of the Seabird Protection Network, as well as awareness of the importance of pilots and boaters keeping their distance from seabird populations, was mixed. A number of key stakeholders and focus group participants noted that they did not know about SPN, and they were unaware of SPN's primary message to stay away from nesting seabird colonies.

For the people who do know SPN's staff, the awareness and perception is very positive. The SPN's focus on education and outreach, with a positive approach, was very favorably received. As a key stakeholder noted, "The staff is sincere – they are focused on sharing information, and that message [resonates] with people. It is clear that it is a two-way message – the SPN staff want to hear our perspectives and learn from us. The message from them is, "We want to receive information from you!" – people love that – the opportunity to talk about themselves. It puts people at ease. They have become part of the community. We love having them here! Now we think, "Hey, we should invite SPN out here!""

When discussing the barriers that might prevent pilots, boaters, paddlers, and kayakers from keeping their distance from seabird groups, key stakeholders and focus group participants noted that the primary barrier was a lack of knowledge and/or lack of understanding about the need to keep their distance. As one key stakeholder said, "Most pilots would not fly voluntarily below 1,000 feet, since they would need to be within gliding distance of the shore."

2.2. Specific topics of interest/What people would like to know

When key stakeholders and focus group participants were asked about topics that they were most interested in hearing about, there were several key topics that were of particular interest:

2.2.1 Information about birds (especially what pilots and boaters need to know about birds)

Focus group participants are interested in birds, including the following aspects:

- Bird nesting habits: Where and when do birds nest? What kinds of behaviors might pilots and boaters observe?
- Seasonality: What are the critical times throughout the year (and critical times of day) that pilots and boaters need to be aware of? E.g. When are the breeding and nesting times? Is there a safe time to fly, when the birds are gone?
- Where (what zone or altitude) are the birds most impacted by pilots?
- Behavior: What is the behavior of birds, especially when a bird notices a pilot flying too close?
- Species: What species of birds live along the California coast, and where are they located?
- If birds are migratory, what are their migration routes, and where and when are migratory birds most likely to be impacted by pilots and boaters?
- Population data: Is the bird population declining?
- Bird identification: Photos of birds with identification so that people will know what they're looking at.
- Bird behaviors: Which birds are the deep divers, which ones are more shallow divers, and which birds associate with porpoises and whales?
- How the ecosystem is connected, how the deep diving birds bring up the fish to the surface, and what the gulls do

2.2.2 **Information about avoiding birds**

Focus group participants were very interested in knowing more about how to avoid birds:

Pilots

- What does a pilot need to do when a bird notices them flying too close? E.g. does the pilot fly straight and level? Descend, because a bird's going to climb?
- Clearly identify what areas to avoid and specific times to avoid them. Show precisely where to fly at or above 1,000 feet. Is it just along the coast? How far inland does that extend? How far offshore does it extend? Put an easily identifiable symbol on the charts that show where to fly at or above 1,000 feet.
- **Note particularly acute times. This encourages people to pay close attention during specific time frames.**

Boaters

The conversation among the boaters, paddlers, and kayakers illuminated important aspects that SPN needs to understand about activity on the water:

- What are the areas of most vulnerability? Where should boaters avoid, and what birds are there? How far offshore?
- From a fisherman's standpoint, birds are one of the most important things to look for, and fishermen run toward them. They know where the bait is, and usually there are bigger fish underneath them. When SPN says to stay away from them – it goes counter to what fishermen do. As one focus group participant said, "Given that, how do you behave more intelligently? If SPN staff just said stay away – I'm not going to do that. If I see pelicans diving, that's where I'll go. When you get to the spot (where birds are), how you behave around it is where the conversation needs to begin, if you're just talking about protecting birds on the water. It's a whole other conversation when they're nesting and on the cliffs. I don't drive my boat along the cliffs. I'm typically out further."
- According to focus group participants, most knowledgeable fishermen will not disturb or break up bird feeding activity. However, weekend fisherman may drive through a group of birds on the water, disturbing them. Most knowledgeable fishermen will stay on the boundary, close to it, but try not to disturb it.
- Show why it is important not to disturb nesting birds. As one focus group participant said, "If people understand the "why", instead of just "Don't do that" – if they're informed – then they're making those connections, and hopefully they care."
- A laminated card with identification of the birds (that need protecting) on one side, and the locations to avoid on the other side would be very useful, with all the information in one place. Focus group participants said that they would keep a laminated card like this on the deck.

2.2.3 Information about the impact being too close/disturbing birds

Focus group participants were very interested in knowing more about the impacts of being too close to birds:

Pilots

- Include **data about the impact** of flying too close. Show how many eggs are being eaten and how many birds have been impacted for the for the last two years, including the current year. What is the outcome of these avoidance measures?

- Show that by flying or boating at least 1,000 feet away also avoids disrupting the nesting patterns.
- Provide data on bird strikes along the coast, and data about aircraft encroaching upon bird habitat.
- Include real life case studies
- Use images to clearly convey messages: E.g. “Keep them here (in the nest), not here (crashed on a windscreen)”

Boaters

- Show what boaters, paddlers, and kayakers need to do/avoid while they are out on the water, and why. Show the locations. Be specific in what the expectations are, and provide information and signage about this.
- Show the impact of not avoiding nesting bird colonies. Show the impact of getting too close, and what happens when birds fly away, or flush. It is important that boaters understand what birds flying away from them really means, and if it is shown dramatically, people will pay attention.
- Show where the active nesting areas are located, and how and when to avoid them. This information is missing from the landings, and it would be important to have it on a big sign at the launch ramp. Show that it is the boaters’ proximity to the nesting grounds, not boaters out on the open water.
- One focus group participant described the impact of protected areas: “Before Egg Rock at Devil’s Slide was protected, I used to kayak near Moss Beach a lot. They have been trying to reestablish the murre colony for a long time. Before it was protected, I used to paddle inside the rock because it was easier and I like to beachcomb along there. But now I don’t; you’re not allowed to paddle inside that rock any more. That’s one of those things when you’re a kayaker – safety-wise, it’d be a lot easier if I just cut inside this rock, and it’s certainly more fun, but you’re disturbing a bird colony that you may or may not know about. For the average person, they’re just some birds on the rock.”

2.2.4 Information about recommended places to fly

Pilot focus group participants were very interested in knowing more about recommended places to fly. They suggested that SPN’s presentations and materials include a recommended route, such as the Bay Tour, with information about how to fly it safely. [Note: The FAA Safety Team (FAAST) offers a seminar called “Flying the Bay

Tour.”] They also suggested developing a one page diagram with the coastline and annotations. The annotations would include airports, places to have lunch, etc.

2.2.5 Information about regulations

Pilot and boater focus group participants noted that they would like to know about fish and wildlife regulations, and what areas they cover.

2.3 Outreach Presentations: Promoting the Presentations and Overall Messages

The outreach presentation was a primary area of focus for this evaluation and planning project, and it was a main topic of inquiry during the community conversations/focus groups. Questions about promoting the outreach presentations and about the content of the presentations elicited thoughtful responses.

Focus group participants were asked specifically about their responses to titles and descriptions of the outreach presentations. SPN staff were interested in knowing which titles and descriptions might encourage priority audiences to go to a presentation.

Pilots

For the participants in the pilot focus group, the following examples of titles and descriptions were used to solicit ideas:

a. How Pilots Can Help Protect Marine Wildlife

California's coast offers pilots unparalleled views of wildlife and scenery. This presentation will introduce you to coastal wildlife and illuminate how pilots can be partners in seabird and marine mammal conservation.

b. Flying the California Coast: Regulations You Should Know

This seminar will introduce you to regulations you should know when you fly the coast, illuminate how low overflights can be problematic for seabird and marine mammal conservation, and ultimately focus on the location of NOAA Regulated Overflight Zones.

c. The Seabird Protection Network Presents Flying Seabird Safe

Learn how to fly seabird-safe along California's coast. This presentation will show you how to identify high concentrations of seabirds and offer tips on how to avoid them when you fly.

Pilot focus group participants responded that they like aspects of each of these titles. Protecting marine wildlife, flying the California coast, and flying safely all resonated with the pilots. Their suggested re-wording of titles included the following:

- *Flying the California Coast Safely and Protecting Wildlife*
- *Fly the Coast Safely for Birds and Wildlife*
- *Flying the California Coast: What You Need to Know*

The pilot focus group participants noted that SPN needs to be aware that there are many demands on a pilot's attention – many details that they need to keep track of – including where and when they may not fly.

Some pilots may be especially interested in the information “low overflights can be problematic for seabird and marine mammal conservation,” as it conveys the danger to seabirds, and the importance of the full scope of the problem, which is an important message to get across.

2.3.1 A Note about Regulations: Concerns, Questions, and Tools

Overall, focus group participants suggested that SPN not use the term “regulations” in the title. Pilots noted that it sounds heavy-handed, and that a more positive approach would be more effective. As one focus group participant noted, “This organization appears to be genuinely driven as a partnership. It's more effective, more likely to get compliance if you invite people in to help solve problems.” Pilots noted that they are familiar with the charts and with NOAA's restricted zones that are time-specific. They also noted that they are very aware of wind and weather. They suggested that their pilot's checklist could include an awareness of birds.

Focus group participants had many questions about regulated areas:

- The area to avoid is large. Is it necessary to avoid it all year round?
- What happens if someone flies in a restricted area? Some pilots are not aware of the specific consequences.
- Several focus group participants mentioned that they have effective tools to answer these questions:
 - All the regulations are summarized on the charts (magenta, blue, pulldown areas). Flight instructors ask their students to memorize this information, and they discuss why these regulations exist. Knowing why they exist motivates people to fly accordingly.
 - The [ADS-B](#) (Automatic Dependent Surveillance-Broadcast) is new technology/new equipment that pilots will have to have that reports information about aircraft to satellites. It provides a lot of information, and it will facilitate the ability to collect data, which could be used to target messaging more appropriately. The information will be

very specific. It may be that SPN can work with the agency collecting the information to do follow-up. E.g., the opportunity exists that SPN could tell a pilot, “You might not have known [that you were in an overflight area.] What was your decision-making process? How did this slip through the cracks? We want to help you fly safely.” It will be law in 2020. More and more aircraft are becoming compliant. People are already using the ADS-B.

There was a discussion about the frequency of sending a message to pilots, relating to the awareness that pilots have many details they need to keep track of. Focus group members noted that if they hear messages frequently or over a long period of time, they pay less attention. If it is less frequent, they pay attention. They discussed various communications options. One option was to work with Air Traffic Control, which puts out an “Attention all aircraft” statement. SPN could work with the FAA to add notices about avoiding nesting bird colonies to these statements, especially in critical times. They could also work with the FAA to add bird symbols to the chart.

Focus group participants noted that the people who intentionally disregard regulations would most likely not be persuaded to adhere to the regulations by an outreach presentation. However, if the regulations are placed in a prominent position on the chart, that might make a difference.

Boaters

For the participants in the boater focus group, the following examples of titles and descriptions were used to solicit ideas:

a. How You Can Help Protect Marine Wildlife

California's coast offers boaters unparalleled views of wildlife and scenery. This presentation will introduce you to coastal wildlife and illuminate how boaters can be partners in seabird and marine mammal conservation.

b. Regulations You Should Know About Boating the California Coast

This seminar will introduce you to regulations you should know when you boat along the coast, illuminate how boating too close can be problematic for seabirds and marine mammals, and focus on the location of Special Closures in California's Marine Protected Areas.

c. *The Seabird Protection Network Presents Boating Seabird Safe*

Learn how to steer clear of seabirds on California's coast. This presentation will show you how to identify high concentrations of seabirds and offer tips on how to give them space when you boat or paddle.

The three options prompted lively discussion among the focus group participants.

Overall, boaters preferred the A option (*How You Can Help Protect Marine Wildlife*), because it is broad and includes seabirds, and includes them as part of marine wildlife, so that people associate birds with marine wildlife. The B option (*Regulations You Should Know About Boating the California Coast*) was not well-received; it was seen as not interesting. Option C (*The Seabird Protection Network Presents Boating Seabird Safe*) was also relatively well-received, and focus group participants noted that there is curiosity about seabirds. They also noted that the title and description need to be targeted to the specific audience.

It was noted that there is a new boater safety certificate that all boaters will have to have by 2021. Right now there is not a requirement of safety training, but it will be required for everyone who drives a boat beginning in 2021. Focus group participants recommended connecting SPN's outreach program with the safety certificate program, called the California Boater Card, from the California Division of Boating and Waterways. <http://www.dbw.ca.gov/> and <http://californiaboatercard.com/>. SPN's outreach could include suggestions on how boaters can be environmentally aware. The message could be that it's not just seabirds, but also how boaters deal with discharge, reporting spills, etc. All this information should be in one place, and it could be in the safety class.

2.4 Outreach Presentation: Main Messages and Specific Content

The sections above address content and strategies that are applicable to a variety of SPN activities. This section addresses the outreach presentation specifically, and reflects the perspectives and comments of participants in the pilot and boater focus groups. A short version of the outreach presentation was run during the focus groups, and focus group participants were asked for their thoughts and suggestions on the overall presentation as well as on each slide. Below are comments on the overall presentation. Please see Appendix E for specific feedback on each slide.

Focus group participants talked about what they saw as the *main messages* of the presentation:

Pilot Focus Group

Pilot focus group participants indicated that the following were the main messages that they received from the presentation:

- Fly high (Pilots also said that they don't think of 1,000 feet as "Fly high". See note below.)
- One airplane can cause a colony to crash
- The effort that birds put into raising a single egg
- We need to be conscious about what effect we have

A note about the term "Fly high": Pilots don't consider 1,000 feet flying high. When they hear that term, they think of flying 2,000 feet, 1,500 feet, or a mile high for cross country. Focus group participants suggested that SPN say, "Stay above 1,000 feet."

Boater Focus Group

Boater focus group participants indicated that the following were the main messages of the presentation:

- Give 'em a break
- Where the restricted areas are
- Even one screw-up could be really bad

The follow-up conversation was wide-ranging, and comments are presented under specific topics below:

Rules

A discussion about rules and fines followed, focusing on the Marine Life Protection Act (MLPA) marine protected areas (MPAs). Some people noted that boaters can drive through MPAs. They appreciated the opportunity to open up the conversation, to effectively ask boaters to consider the birds. They noted that they are not usually thinking about birds, and suggested putting a sign in a very visible place at the landing, to increase boaters' awareness of it.

One focus group participant suggested that SPN include information about the rules and fines.

Races

One participant noted that before paddleboard races, race officials will give a quick reminder to racers to stay away from specific areas, but they don't talk about the birds. There are signs and white buoys, but this information should also be in the race instructions, for when races are passing sensitive areas or nesting bird colonies.

Another participant reiterated this point in racing sailboats. They noted that the people who run the races would be happy to have SPN give an outreach presentation – before a race or during an evening presentation, with information about the birds, and why they need to stay away from them. This will help the racers understand why the white buoys are placed where they are.

Focus group participants suggested that SPN seek to have this be part of race instructions. They suggested that SPN staff go to yacht clubs and work with them so that every regatta that the yacht club runs identifies restricted areas where boats are not allowed to run. SPN can provide/present the information about where the restricted areas are, and why it is important to steer clear of birds.

The Value of Giving Space to Nesting Seabird Colonies

There was general agreement that the presentation could do more to communicate the value of giving space to nesting seabird colonies. Focus group participants suggested including information about estimated populations of specific birds (such as the common murre) in the past and currently, and information about prime nesting times, emphasizing how human activities have a large impact. They suggested talking about how the central and northern coast of California is the main nesting area of these birds, and if someone affects one of these regions, they are having a large impact on the entire colony. Focus group participants described that the story of the Gold Rush (told during the presentation) is fascinating.

Focus group participants noted that the beginning of the presentation, explaining the upwelling, is a reminder of what a special area the central coast is. They noted that boaters would be fascinated by this. Other focus group members suggested including a slide about the marine ecosystem/food web, and the story of anchovies and the impact of El Niño (the diminished food supply.) This demonstrates that the ecosystem is being challenged, and that boaters, paddlers, and kayakers will not want to add to those problems through their actions.

Other focus group members noted that the focus on the different types of birds is very interesting, and suggested following this with information about what audience members need to consider. Focus group participants did note that the presentation did not have sufficient information about what to look for – what a nesting colony looks like, that they're on the cliffs, etc. They suggested that a little more detail about how to ID a nesting colony would be helpful.

Who Are the Primary Causes of Disturbances?

Focus group participants in both focus groups had concerns about the extent of the problem caused by being closer than 1,000 feet from nesting bird colonies, and who are the primary causes of the disturbances. In the pilot focus group, participants asked about the statistics of how often flying below 1,000 feet causes disturbances for nesting bird colonies, and what type of pilots fly that low. Participants asked, "Have they done studies to verify that this is actually a problem for General Aviation pilots? Or is the issue mainly military helicopter operators or others? Where is the biggest problem? How many of us fly that low anyway?" It was acknowledged that helicopter pilots and military helicopters routinely fly low, and that SPN's outreach activities should include helicopter pilots, as well.

In the boater focus group, participants noted that it's important to say that boaters aren't the only disturbance. They suggested that SPN mention why birds are already in trouble with oil spills, etc. They suggested that the message be, "You're one of the problems and you can help contribute to the solution." SPN can talk about all the stressors they have, and that boaters are one of the stressors.

Images

Focus group participants spoke at length about the ability of images to impact people:

- The information in the presentation about the white rocks, including why they are white, was popular. The comments included, "People remember when it is striking [i.e. bird defecation.] Explain why the rock is white; it's more memorable."
- Include actual pictures of what can happen if pilots and boaters don't avoid nesting bird colonies.
- Participants suggested including images that show how far away from the rocks pilots and boaters need to be. For example, when pilots want to fly low, include images that show what this looks like from the plane. When pilots want to go whale watching at a

lower altitude, how far offshore do they need to be? Show images indicating this. Are there tips SPN can give to pilots to help them know how far away they are?

- Boaters suggested using photographs of birds that have been disturbed, eggs that have been broken, to demonstrate the impact of being too close. They suggested that SPN use vivid and striking images of this reality to get people's attention.
- Post/use short video clips, which will engage people (see *Planet Earth*, the David Attenborough film, which engages viewers.) As an example, SPN may have a clip about baby chicks, to engage people, and make the emotional connection. They could then tie that to the massive negative impact of being too close.

2.5 Core Messages

Focus group participants were asked specifically about their responses to the core messages that are at the heart of SPN's outreach. SPN is interested in knowing which messages resonated with focus group participants, whether they understood the importance of the message, and whether they had other suggestions for wording the core messages.

Pilots

SPN's goals are for pilots to feel that it is important to fly high along the coast, that they have a role to play in the protection of these birds, and that they can be partners with SPN and help spread the message. Examples of core messages were distributed, and focus group participants responded to them.

Examples of core messages for pilots

- A. 1,000' and above over the California coast – it's seabird safe
- B. Thank you for flying high over the California coast – it's seabird safe!
- C. Help seabirds: fly high over the coast.
- D. Fly above 1,000' AGL: it's for the birds.
- E. Fly at or above 1,000' feet AGL for safety and wildlife. It's a good practice!

The pilot focus group participants responded well to A (*1,000' and above over the California coast – it's seabird safe*) and E (*Fly at or above 1,000' feet AGL for safety and wildlife. It's a good practice!*) A is straightforward and simple. B and C did not resonate (see note on page 17 about "Fly High": "We don't know what *Fly High* means". E is straightforward, as well. The pilots said that it is important to mention that this refers to flying along the coast. In addition, there was some confusion about AGL. Some pilots did not know that AGL means "above any underlying ground surface." They asked whether 1,000 feet AGL means 1,000 above water

level. They also asked what happens if they are flying above a 3,000 foot cliff, for example, and whether that means the pilot needs to fly at 4,000 feet. Pilots suggested the following revisions: *“Fly above 1,000’: It’s good for you and good for the birds!”* They also suggested *“Thank you for flying above 1,000 feet over the California coast.”* Focus group participants found this wording inviting, and it acknowledges the sense of partnership.

Flying seabird-safe: Focus group members had a variety of responses to this term. For some, it was a new term, and it conveyed the meaning of not bothering or being bothered by seabirds. For others, it communicates clearly what the goal is. “We know the acronym FSS [Flight Service Station]. This is a new FSS! [Fly Seabird Safe]” Some members thought that it sounds like a marketing slogan, but not substantive in itself.

There was a significant discussion about “seabird” – and many of the people in the pilot focus group didn’t consider that as important to the message. As one person said, “For us, they’re all birds.” Pilots noted that keeping track of seabirds is a significant task, and with all that they have to do to fly safely, thinking about this in broader terms, such as “birds” or “wildlife” in general, would make more sense and help people remember. Using a more general term may convey the message that SPN works with other organizations, such as more general bird organizations or marine wildlife organizations, to convey a unified message. However, there was an acknowledgement that there is a tradeoff associated with a broader term. The advantages of saying “seabird” are that SPN can be more specific, especially if they can show why flying 1,000 feet and above over the coast is important.

There was also a strong sense that pilot safety is important. As one person said, “It’s a fine term to use, if they are aware of our safety, as well as the safety of the seabirds.”

Boaters

SPN’s goals are for boaters, paddlers, and kayakers to feel that it is important to steer clear along the coast, that they have a role to play in the protection of these birds, and that they can be partners with SPN and help spread the message. Examples of core messages were distributed, and focus group participants responded to them.

Examples of core messages for boaters

- A. Steer clear of seabirds on the California Coast.
- B. Thank you for giving wildlife and seabirds space.
- C. Help seabirds and wildlife: give them the space they need to feed, breed and rest.

D. Keep 1000' from nesting seabirds and wildlife – they need space.

Overall, the boaters preferred “C”, with the suggested change to say, “Help protect wildlife and seabirds.” They noted that “Steer Clear” is a nice catch-phrase, but that it doesn’t mean as much to them – it’s too open-ended. They noted that they liked the specifics of D (*Keep 1000’ from nesting seabirds and wildlife*) and combine it with C (*give them the space they need to feed, breed, rest, and survive (or thrive)*). They responded well to the “feed, breathe, and rest” phrase, because it answers the questions of “why”. They suggested that it could say, “When you stay 1,000 feet from nesting birds and wildlife, they can feed, breed, rest, and thrive (or recover.)” It communicates that a boater’s/paddler’s/kayaker’s behavior can have an impact, and that the consequences can be positive. There was a sense that 1,000 feet is difficult to estimate.

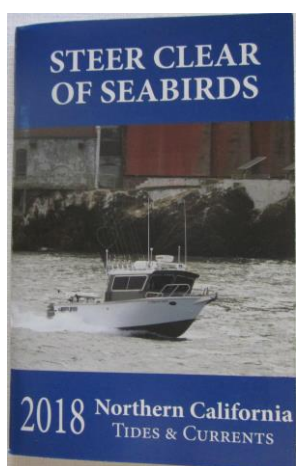
2.6 Outreach Products

SPN creates and disseminates outreach products to communicate its core messages to its primary audiences. These include:

- Small Tidebook
- Large Tidebook
- ID & Guide for Boaters (waterproof)
- Marine Grade Stickers



Small Tidebook



Large Tidebook



ID & Guide for Boaters



Marine Grade Sticker

Examples of these products were distributed to the boater focus group participants, and they provided their thoughts and reactions to each of them:

Small Tidebook: Focus group participants noted that small tidebooks like these are not used much now; people use apps. People do have paper tidebooks on board, but they typically do not use them.

Large Tidebook: Focus group participants considered these far superior to the small tidebook. They mentioned that the large tidebook has good maps, so it's easier to recognize their location; it has information about currents, and it's bigger, so it's easier to read. Information about currents is very useful.

ID & Guide for Boaters (waterproof): This was very popular among focus group participants. People especially appreciated the bird identifications, the MLPA definitions, and the amount of information overall.

Focus group participants suggested combining the large tidebook with the ID & Guide for Boaters. It would have information about the tides, information about SPN, identify birds, and help people be aware when they are around birds along the coast. Another suggestion was to look into the CA Department of Fish & Wildlife's laminated ID chart for rockfish as an example of what SPN could do. SPN could create a laminated sheet with the bird identification and SPN's message. Some focus group participants suggested a laminated trifold as the most functional format. That would last longer in the boat, and would be easier to use. It was suggested that SPN could have them at launch sites, marinas, outdoor pro shops, etc.

Marine Grade Stickers: This was popular among focus group participants, who noted that they might put these stickers on their car, the windshield of their boat, their kayak, their notebook, water bottle, computer, etc.

2.7 Community Outreach and Building Partnerships

SPN seeks to deepen its relationships with primary communities, particularly pilots, boaters, paddlers, and kayakers. To do this, SPN sought to learn what focus group participants and key stakeholders suggest as the most effective ways to communicate with pilots and boaters.

Pilots

Pilots suggested the following communications strategies:

- NOTAMs [Notices to Airmen] are an essential way to communicate with pilots, especially if it's during an acute (critical) time for the birds. SPN can work with airport managers, the FAA, and Flight Service Stations (FSS) to find out more.
- Partner with ForeFlight to put out a notice indicating that the breeding season is starting. Foreflight is a company that provides electronic maps and charts for pilots.
<https://www.foreflight.com/>
- The timing for when to send out these messages is important. Focus group participants spoke at length about the frequency of messages, and that they need to be infrequent to be effective, that it should be done at the most critical time. They suggested a big push during highly critical months when birds are more apt to be disturbed.
- AOPA Pilot magazine: This is a monthly publication from the Airport Owners and Pilots Association, a national organization: <https://www.aopa.org/>
- Safety seminars at different clubs
- Reach out to the instructors and students to make them aware of the importance of flying at or above 1,000 feet. Ask instructors to share it with their students
- Collaborate with other organizations to give a joint presentation. For instance, a member of a wildlife group might be more likely to go to a presentation if they know they will be hearing from those who have information that will be useful to them.

Boaters

Boater focus group participants suggested the following communications strategies:

- Sponsor races or events.
- Find out when a club's meeting is. Yacht clubs and other clubs often have monthly meetings, and SPN would be welcome at many of these.
- Put a link on the club's website: The websites of clubs such as the Coastside Fishing Club, Golden Gate Fishing Association, etc. would be a good place to have a link to SPN, on the club's home page. Every club has a webmaster, and SPN could connect with them to make these links.
- Include a short section on the biology of the birds in the outreach presentation.
- Go to Sea Trek Kayak and Stand Up Paddling Center (in Sausalito), 101 Surf Sports (in San Rafael and Redwood City), and businesses in Tomales Bay where people can rent boats or kayaks. Work with those store owners and employees, and display posters, tidebooks, etc. at those sites. SPN could put posters there, and the store staff can remind people before they go out in their boat. A laminated product would be well-received.
- Create a place where people could "Ask SPN", similar to the "Ask a Warden" program, which was previously on the Coastside Fishing Club website. People could ask questions

(about a scenario) and the warden would respond. One of the focus group participants noted, “Prior to the “Ask a Warden” initiative, there was a level of distrust; people wanted to avoid the wardens. But, by offering themselves up as experts of interpretation, without fear of penalty, it became a positive, well-liked feature.” SPN could post on the website a friendly notice that might say something like, “The birds are breeding out here – heads up and please give them space.” This helps SPN be known as knowledgeable about seabirds, and provides the opportunity to talk about bird behavior; they become a source of information. The Coastside Fishing Club website has a number of forums: Fishing Politics, Rules and Regulations; General Forum; Technical Forum; and Web Forum. SPN could post in one or more of these with a message like, “We just want to let everyone know the birds are breeding. Stay clear of the rocks.”

- Consider creating an hour-long course on bird protection, and give bird protection certification. People who have taken the course and become bird protection certified could put that on their website or on a sticker. The idea of a sticker for this was quite popular. As one focus group participant said, “A sticker that says, “Certified” means something.” Another suggestion was to work with the California Division of Boating and Waterways and make bird safety part of the [California Boater Card](#) certificates.
- Understand that SPN’s priority audiences (boaters, paddlers, kayakers, fisherman, etc.) are disparate people on different types of vessels and boards. They are fairly discreet groups, so it is important to communicate a focused message to the individual groups. Each group has its perspectives; they’re following their passion or their business, but they all have an impact, so focus the education to the individual groups.
- Publicize in the press more widely, such as in *Latitude 38*, which would reach a larger audience. Any publication that deals with activities along the coast, such as stand up paddle boarding, boating, kayaking, etc. would be a good place to publicize. One focus group member suggested that SPN consider putting an ad in the Fishing Regulations book, and stories in local and regional newspapers, such as the San Francisco Chronicle.
- Educate the boating community on the uniqueness of the ecosystem that is in this region.
- Increase SPN’s visibility at large – the visibility of including seabirds in the broader awareness of marine life for the general public. How is the health of the seabird population? Also, focus on helping people understand their impact, and why it is a good idea to steer clear. As one focus group participant said, “I’m really visual. If I really cared – if I showed up because I really cared about this topic – I would want to be able to identify those nesting areas – and what that looks like from the water. I didn’t really see that in those images. I’d want to know what I’m seeing.”
- Include more hands-on and interactive activities in the outreach.

- Link with every boating, paddling, and fishing association out there to get the message across about the impact that it has. Focus group members noted that many people don't realize how sensitive the areas are, and that SPN needs to make the point that the people can have a large impact on an entire breeding cycle.
- Focus on beginning boaters.
- Check out the Mono Lake Committee, a successful organization in CA for bird preservation. They have hundreds of thousands of committee members, and one focus group member noted that they've done a stellar job of protecting birds.
- Place signage or placards at all the landings/boat launching areas with a clear, simple message, such as "Please stay away from nesting seabirds." A sign at all the landings will get the message across.

As part of the planning process for developing this evaluation, SPN identified the following organizations as ones they to build a stronger relationship with. Many of these organizations are specifically noted in the recommendations below:

Boaters

- Coastside Fishing Club
- Bolinas Rod and Boat Club
- Bodega Bay Fishermen
- Tomales Bay Boaters Association
- Lawson's Landing
- Harbors
- West Marines
- Tackle Shops

Pilots

- Jato Aviation
- Helicopter pilot school in Bay Area
- Vertical CFI Helicopters
- Ground School / Flight instructors in Bay Area
- Airport Owners and Pilots Association (AOPA)
- California Pilots Association (CalPilots)
- FAA Safety Team (FAAST)

3. Recommendations

The recommendations included here are based on the results of the key stakeholder interviews and the focus groups, and they address specific concerns mentioned by the interviewees and focus group participants. These recommendations take into account the internal capacity of SPN. With approximately 2 full-time equivalent (FTE) staff positions charged with carrying out SPN's activities, the challenge is to recommend the most effective actions that sustainably address SPN's goals and objectives. Some of the recommendations refer to specific tools, organizations, or agencies, and links to these are included where appropriate. The recommendations are intended to be practical. This set of recommendations will serve as a useful tool to be used in guiding decision-making for SPN in the coming years. The recommendations are presented as Highest Priorities, First Tier priorities, Second Tier priorities, and Third Tier priorities. These refer to the recommended order for implementation. Some will be implemented simultaneously, while others must be completed before subsequent ones can begin.

3.1 Highest Priorities

- Continue the current positive approach that SPN uses. Continue to be friendly, encouraging, positive, and proactive in engaging the community
- Review the Key Findings in this report (pp. 9-26) to identify specifically where/in what manner SPN can address each item. The recommendations in this section address the Key Findings, and SPN staff, who have a more thorough understanding of the opportunities, will be able to identify which recommendations will have the highest impact.
- Consider how to continue to communicate with focus group participants and key stakeholders to extend the relationships SPN is developing with them. Develop a plan to extend the relationships. This might include sending the focus group participants and key stakeholders this report (or a summary of it), bringing focus group participants back together after six months or a year to share progress and solicit input and/or advice, asking them to provide introductions to key individuals and organizations, asking them to advise SPN about the processes of [ADS-B](#) technology and the [California Boater Card](#) course. Identify 1-2 pilots, boaters, paddlers, and kayakers who would be interested in providing input and advice to SPN as it explores each of the following recommendations.

3.2 Messages That Resonate

As noted at the beginning of this report, SPN specifically asked, "What messages resonate with pilots, boaters, paddlers, and kayakers? What primary messages should SPN incorporate in all

outreach activities that will most effectively help them accomplish their objectives?” This section addresses that question.

Pilots: First Tier Priorities

- Review and revise the outreach presentation to incorporate the following:
 - See Key Findings to identify specific suggestions
 - Find data that illustrates the population numbers of seabirds historically and currently; the impact of being too close (show how many eggs are being eaten and how many birds have been impacted in the last two years, including the current year. What is the outcome of these avoidance measures?); data about bird strikes along the coast, etc.
 - Illuminate how low overflights are problematic for seabirds. This information should be presented visually.
 - Remove the Airborne Hunting Act from the presentation, but do include information about regulations on the SPN website with links for fuller information.
 - Explain why flying 1,000 feet AGL is important for birds and for pilots
 - Consider how to show that there are 3,400 birds on a small rock
 - Include information about how to avoid violating regulations
 - Focus on specific ways pilots can make a difference
 - Include information about birds, species, habitats, etc.
- Help pilots understand what they are seeing. If they don’t know, it looks like a big rock
- In all messages, say why it’s important to do something or not do something

Pilots: Second Tier Priorities

- Understand that most pilots are safety-driven. Understand also that people care about the animals and want to keep them safe. Safety issues are of practical use, and they appeal to pilots.
- Find the links to make the topic geared toward aviation. Make those links obvious and interesting
- Let the audience members know that SPN is not there to censure them, but to let people know, “We’re trying to protect wildlife, and to work with pilots collaboratively.”

Boaters: First Tier Priorities

- Review and revise the outreach presentation to incorporate the following:
-

- See Key Findings to identify specific suggestions
- Find data that illustrates the population numbers of seabirds historically and currently; the impact of being too close (show how many eggs are being eaten and how many birds have been impacted in the last two years, including the current year. What is the outcome of these avoidance measures?); etc.
- Focus on specific ways boaters, paddlers, and kayakers can make a difference
- Include information about birds, species, habitats, etc.
- Make the point that people can have a large impact on an entire breeding cycle
- Communicate that SPN staff is not advocating shortening the fishing season, but that fisherman do need to stay away from sensitive areas
- Communicate that SPN is protecting people's rights to fish, and that it is important for fisherman to know where the closures are
- In all messages, say why it's important to do something or not do something

3.3 Communication Strategies/Delivering the Message

As noted at the beginning of this report, SPN specifically asked, "What are the best/most effective strategies and tactics to deliver the messages to pilots, boaters, paddlers, and kayakers?" This section addresses that question.

Pilots: First Tier Priorities

- Use videos in SPN's programs and links to websites. Participants in both focus groups talked about how effective videos are at showing impact. Consider doing a 5-minute production that can be added to the FFAST site on the banner page. This would be a way to reach people who don't come to the FFAST programs. It would relate to pilots by portraying a pilot's view of flying along the coast – what being too close looks and sounds like, and would include information about what constitutes a disturbance. Show a video of a sightseeing flight and share why SPN and its partners are concerned about these issues. Talk about safety, wildlife, and bird strikes. Consider working with FFAST to identify potential sources of videos.
- Use images to illustrate SPN's main messages. For example, images of gulls taking eggs, or images of other undesirable behavior alongside an image of a bird in a nest would convey a message of flying, boating, paddling, and kayaking safely. Using photos and videos, show how birds behave and what they look like when they are disturbed. This will help pilots, boaters, paddlers, and kayakers know how to identify cues that a bird is disturbed or under stress. This is most effective when the images are from a plane (for pilots) or from the water (for boaters, paddlers, and kayakers.)

- Provide a sign at the airports: “Caution: Birds in vicinity”
- Identify how SPN can communicate with FAA to add relevant information to the charts; the charts are the primary source of information for pilots. The FAA produces this data. They send the data to the apps that pilots use for charting. Work with an advisor (perhaps one of the key stakeholder interviewees) to explore this.
- There are commercial suppliers who support the sectional aeronautical charts. See https://www.faa.gov/air_traffic/flight_info/aeronav/productcatalog/vfrcharts/Sectional/. Pilots get charts online through subscriptions, and the charts that are available online are the most useful. The [Williams & Heintz Map Corporation](#) produces maps. Consider how SPN could work with them.
- Research the following digital tools as potential ways for SPN to communicate its message to pilots: Electronic Flight Bags (i-pads for maps); [ForeFlight](#) (the biggest company); and Garmin. The FAA Aviation maps have the detail, and this is included in ForeFlight maps. Consider whether a map could provide a pop-up warning whenever a pilot gets close to a restricted area.
- Learn more about [ADS-B](#) (Automatic Dependent Surveillance-Broadcast), and begin to identify how SPN can work with the ADS-B.
 - Consider whether SPN can work with the reporting agency to follow up. Perhaps they can say, “The new ADS-B is reporting you in the [unsafe] zone of birds. Here is how you can fly seabird safe.”
 - If SPN is able to access the information from ADS-B, it could be very useful in terms of narrowcasting and finding out where the need for outreach is the greatest. SPN may find out that there are hot spots, and can focus outreach in those areas.
- Add the focus group participants to the e-newsletter distribution list
- Develop strategies to have a presence at all central coast airports. Work with the airport managers to identify opportunities for signage. For example, work with the Half Moon Bay Pilots Association to add a poster to the case sign at the south end of the Half Moon Bay Airport to tell more about the birds. This will also reach transient pilots (See also Recommendations in the *Building Lasting Partnerships* section.)
- Do not focus on regulations, on what people can't do. Do keep the message focused on outreach and education.
- Use social media to publicize the pilot plaque photos. This helps people connect, so that when they see the photos, they think, “I know him! I know her!”
- Continue talking to flight schools and connecting with the chief pilots. Continue to reach out to instructors, and ask them to share information with their students, and with pilots when they do flight reviews

Pilots: Second Tier Priorities

- Work with Air Traffic Control, which puts out an “Attention all aircraft” statement. Work with the FAA to add notices about avoiding nesting bird colonies to these statements, especially in critical times. Consider the timing and frequency of messages to pilots.
- Look into including a very brief message with the airport weather recordings during critical times. Do this primarily at sea airports. ASOS (Airport Surface Observation System) and AWOS (Automated Weather Observation System) are automated weather recordings found at uncontrolled airports. ATIS (Airport Terminal Information System) is similar but found at controlled airports and is usually recorded by the air traffic controllers.
- Identify who, among SPN’s connections, knows someone at a military base along the coast. Ask for an introduction, and meet with the military base representative in person. SPN will want to establish a collegial relationship with the base management, so that SPN can understand effective ways to work with them. A follow-up could be an outreach presentation to the military base helicopter operators and instructors.
- In publicity, designate every month as a different awareness month (Pelican awareness month, etc.)
- Provide information about a recommended route, such as the Bay Tour, with information about how to fly it safely
- Consider developing a one page diagram with the coastline and annotations. The annotations would include airports, places to have lunch, etc.
- Consider working with the FAA to include SPN information when people order FAA products.
- Check the airport flight directories. These are flight books and web sites with descriptions and key information, such as the runway lengths, when lights are active, etc. The directories include airports along the coast such as Watsonville, Shelter Cove, and Monterey. For these airports, call attention to charts, including, “Bird activity in the area.”
- Review the Truckee Airport [reports](#) from their community outreach focus groups and related comments on their webpage. Hardy Bullock is the Airport’s Director of Aviation & Community Services (hardy.bullock@truckeetahoeairport.com).
- Connect with companies that offer aerial tours, and consider approaching the conversation from a noise abatement standpoint (since companies already think about and are aware of noise abatement issues.) Suggesting that pilots fly at or above 1,000 feet is good for noise abatement and good for the birds.
- Work with the trade magazines, such as the California Pilots magazine and the AOPA magazine.

Pilots: Third Tier Priorities

- Consider working with NOAA or another organization to set up a web site with a heat map of bird concentrations, month by month, so pilots can click on the month to see the climatic map of birds. This would be similar to the turbulence chart, with which pilots are already familiar
- Consider other items, such as keychains for aircraft keys with a small bird to remind people that they learned something about seabirds.
- Consider working with local elementary schools. Work with pilots to talk to the students about flying and birds. Flying clubs could hang artwork the students create.
- Work with local Boy Scout troops: Train interested Boy Scouts and ask them to give a presentation once a month. Station the trained Scouts at airports. They can ask the pilots, “Were you aware of this?” It may have a deeper impact if the information/awareness comes from a young person. This could be similar to the Civil Air Patrol’s education program and SPN could work with other organizations to help spread the message.
- Consider creating t-shirts with “I’m a member of the SPN!” on it. People could wear them and post their photos on social media. FAAST would be happy to publicize it.

Boaters: First Tier Priorities

- Use videos in SPN’s programs and links to websites. Participants in both focus groups talked about how effective videos are at showing impact. Consider doing a 5-minute production that can be added to club’s websites. It would relate to boaters, paddlers, and kayakers by portraying what the view from the water is – what being too close looks and sounds like, and would include information about what constitutes a disturbance.
 - Work with harbormasters to place signage or placards at all the landings/boat launching areas with a clear, simple message, such as “Please stay away from nesting seabirds.” Post information at each of the following places, which are where boaters go for information about ocean conditions and regulations: NOAA websites, working with the Harbormaster, who updates the weather buoy frequently; and surf apps that indicate wind and waves. The Golden Gate Marine Protection Act (MPA) Collaborative has billboards at the boat launches.
 - Walk the dock and engage people in conversation
 - Develop a laminated card with identification of the birds (that need protecting) on one side, and the seasons and locations to avoid on the other side.
 - Place pamphlets in the harbormasters’ offices
 - Identify the publications that will be most effective publicity tools. These include *Latitude 38* (which would reach a large audience), *Boats & Harbors* magazine, and *Sport Fishing*
-

Magazine. Any publication that deals with activities along the coast, such as stand up paddle boarding, boating, kayaking, etc. would be a good place to publicize.

- Identify the various maps and apps to help boaters locate themselves on the water, and work with the companies to identify a way to make notations on the maps/apps, and to get them included in the chart chips. Work with an advisor (perhaps one of the key stakeholder interviewees) to explore this:
 - This may include working with manufacturers to incentivize them to upgrade their programs to include the MPAs
 - Work with the manufacturers, such as Navionics and Garmin, to suggest that they include a mention about the up-to-date maps in their marketing brochures.
 - Consider ways to make it easier to help people update their GPS software (to update the new maps)
 - Submit information to other GPS companies and websites ([Full Speed Fishing](#), [Golden Gate Fishermen's Association](#), [Golden Gate Salmon Association](#))
- Connect with the [Seafood Marketing Association](#) at each port. Reach out and ask them, "How can we make your members aware of seabirds?" Every port has a commercial fishing group associated with it. Cultivate a relationship with the commercial fisherman. For example, the [Coastside Fishing Club](#) has more than 10,000 members. Consider producing something that could be distributed to the members of these organizations. In Southern California, there are the [Sportfishing Association of California](#) and the [Bloody Decks](#) groups.

Boaters: Second Tier Priorities

- Consider sponsoring races or events.
- Work with race organizers to include bird awareness in race instructions
- Consider creating an hour-long course on bird protection, and give bird protection certification. People who have taken the course and become bird protection certified could put that on their website or on a sticker. The idea of a sticker for this was quite popular. As one focus group participant said, "A sticker that says, "Certified" means something."
- Work with the California Division of Boating and Waterways and make bird safety part of the [California Boater Card](#) certificates.
- Understand that SPN's priority audiences (boaters, paddlers, kayakers, fisherman, etc.) are disparate people on different types of vessels and boards. They are fairly discreet groups, so it is important to communicate a focused message to the individual groups. Each group has its perspectives; they're following their passion or their business, but they all have an impact, so focus the education to the individual groups.

- Continue working with the California Department of Fish and Wildlife to include information on seabirds and special closures in the Ocean Sport Fishing Regulations book
- Work to place stories in local and regional newspapers, such as the San Francisco Chronicle and Half Moon Bay Review
- Consider working with the Coast Guard, which uses Channel 16 for important announcements. Use that channel to broadcast a message, to not disturb nesting sea birds. The MPA people are also interested in this and in a specific aspect – boats that use bright lights. Consider looking into when people primarily use bright lights, and how these lights might impact the birds. Consider developing a matrix that indicates when these messages could go out to have the most impact.
- Partner with bird groups. Create a program that shows if they have seen every bird on that brochure, they will get an award.
- Publicize topics focused on maintaining and augmenting biodiversity and on murre bird stories
- Consider creating a place where people could “Ask SPN”, similar to the “Ask a Warden” program, which was previously on the Coastside Fishing Club website. People could ask questions about a scenario and SPN staff would respond.
- Consider where SPN can find the stories that have led to improvement

3.4 Building Lasting Partnerships

As noted at the beginning of this report, SPN specifically asked, “What are the best/most effective ways to build lasting partnerships with pilots, boaters, paddlers, and kayakers?” This section addresses that question. Focus group participants and key stakeholders reiterated the importance of partnering with other organizations to communicate their message. They recommended the following:

Pilots: First Tier Priorities

- Continue to work closely with the FAA Safety Team (FAAST) and its WINGS program. They are an enthusiastic partner. Be available and willing to travel all over the Bay Area to join with FAAST in giving presentations. FAAST has wide coverage of its programs. Their announcements go out to ninety pilots, including helicopter pilots, and this would be a good way to reach helicopter Certified Flight Instructors (CFIs). People who take the WINGS class get credit, so it is likely that it will draw an audience. The FAA sends out emails, and every registered airman gets them. They have a massive distribution list, and many people are looking for a class.

- Work with local airports to identify locations for signs and posters. For example, Half Moon Bay (HMB) Airport is a hub airport. If SPN were to put a sign or poster about birds on the fence at HMB, pilots would see it as they exit. It will help them remember what to look for while they are there, and include reminders about overflights
- Continue to work with Gretchen Kelly at San Mateo County Airports. In collaboration with her, determine how SPN can assist with pilot briefings and flight trainings, and work with the four flight schools. JATO Aviation (at the San Carlos Airport) does advanced flight training, including doing GPS technology-focused seminars. Tour operators offer seminars for flying in the areas. In addition, Gretchen Kelly's office sends out SPN information via their newsletter, Facebook page, and website. Connect with Davi Howard, the Communications Specialist, to develop effective communication strategies. As Gretchen Kelly noted, "There will be more opportunities to do things together. We are looking into aviation-themed parks at our airports, along the perimeters. We want to make it fun, and are looking into ways to include murre models and signage. We're at least a year out from implementing this, but there may be ways that SPN can help. "
- Connect with Robinson Helicopter Company (<https://robinsonheli.com/>) and Specialized Helicopters (<https://www.specializedheli.com/>) to learn more about what safety dissemination they do
- Continue to participate in Dream Machines at the Half Moon Bay Airport every year
- Continue to partner with SPN's current partners. When SPN regularly shows up, pilots became allies and advocates. As one key stakeholder noted, "This is important, as the pilots talk to visiting pilots about the marine overflight areas. They are the peers, and when they (the pilots) talk about these areas, other pilots listen. It works best that way!"

Pilots: Second Tier Priorities

- Partner with flight instructors, aviation organizations, and wildlife organizations. Collaborate in preparation or give a presentation together. For instance, a member of a wildlife group might be more likely to go to a presentation if they think, "I am hearing from those who have information that will be useful to me."
- Ask Gretchen Kelly who to connect with at the [Hiller Aviation Museum](#). This museum has seminars and many programs for different audiences. They get over 100,000 visitors a year. They have a Fun Run on the runway on April 22nd that brings in 5,000 people. Consider having a table at that event
- Connect with the Airport Owners and Pilots Association (AOPA), which is interested in sharing information with pilots. AOPA does educational outreach programs for pilots. Sometimes they have big gatherings; consider tabling at one of them. Contact Jolie Lucas, a

local member of AOPA, who is an advocate on pilot safety. Jolie Lucas is VP of the California Pilots Association, and her email is JolieLucas@charter.net.

- Consider partnering with the [Chapter 20 of the Experimental Aircraft Association](#), which has regular events and is very active. They meet every third Saturday of the month. They give kids free airport rides and do a number of programs. Gretchen Kelly offered to make an introduction.

Boaters: First Tier Priorities

- Contact the high priority clubs the SPN has identified (Coastside Fishing Club, Bolinas Rod and Boat Club, Bodega Bay Fishermen, Tomales Bay Boaters Association, etc.) and find out when the club's meeting is. Yacht clubs and other clubs often have monthly meetings, and SPN would be welcome at many of these.
- Put a link on the clubs' websites: The websites of clubs such as the Coastside Fishing Club, Golden Gate Fishing Association, etc. would be a good place to have a link to SPN, on the club's home page. Every club has a webmaster, and SPN could connect with them to make these links. SPN could post on the website a friendly notice that might say something like, "The birds are breeding out here – heads up and please give them space." This helps SPN be known as knowledgeable about seabirds, and provides the opportunity to talk about bird behavior; they become a source of information. The Coastside Fishing Club website has a number of forums: Fishing Politics, Rules and Regulations; General Forum; Technical Forum; and Web Forum. Consider posting in one or more of these with a message like, "We just want to let everyone know the birds are breeding. Stay clear of the rocks."
- Go to Sea Trek Kayak and Stand Up Paddling Center (in Sausalito), 101 Surf Sports (in San Rafael and Redwood City), and businesses in Tomales Bay where people can rent boats or kayaks. Work with those store owners and employees, and display posters, tidebooks, etc. at those sites. SPN could put posters there, and the store staff can remind people before they go out in their boat. A laminated product would be well-received.

APPENDIX

Appendix A: List of Staff and Key Stakeholder Interviewees

Seabird Protection Network Staff

1. Paul Hobi, Program Manager
2. Wendy Kordesch, Outreach Specialist
3. Karen Reyna, Greater Farallones National Marine Sanctuary

Key Stakeholder Interviews

1. Gretchen Kelly, Airport Manager, County of San Mateo
2. Sarah Hughes, FAA Safety Team, Oakland
3. Karen Arendt, FAA Safety Team, San Jose
4. Dave Kramer, Ground Instructor/Aerial Tour Pilot, San Carlos Flight Center
5. Lt. James Ober, California Department of Fish and Wildlife, San Mateo County Warden
6. Captain Chris Duba, Captain of the Silver Fox Sportfishing and Tour Boat
7. Captain Tom Mattusch, Captain of the Huli Cat (wildlife watching and fishing boat)
8. Brian Branscomb, Member of the Overflight Working Group of the Greater Farallones National Marine Sanctuary Advisory Council; Commercial pilot, member of Half Moon Bay Pilots Association
9. Lt. Samuel Ingham, United States Coast Guard

Contacted but not interviewed:

1. April Gafford, Founder and chief pilot of JATO Aviation
2. Marc Ashton, Vice President, Petaluma Area Pilots Association
3. Nancy Sasser, Petaluma Area Pilots Association
4. Chris Gularte, President/Director of Operations, Specialized Helicopters, Inc.

Appendix B: Preliminary Analysis

(Provided Separately)

Appendix C: Focus Group Protocols

Pilot Focus Group (March 28, 2018)

Good evening and welcome to our session tonight. Thank you for taking the time to join our discussion about the Seabird Protection Network. We would like to find out more about how general aviation pilots feel about flying bird-safe, and your recommendations on ways to better connect with general aviation pilots. Please remember that there are no right or wrong answers, but rather differing points of view. Please feel free to share your point of view even if it differs from what others have said. I'll start with a brief summary:

The SPN works to reduce human disturbances to seabirds by partnering with airports, pilots associations and the FAA's Safety Team on outreach products and presentations targeting the pilot community with information about how to fly 'seabird safe'. They are a program of Greater Farallones National Marine Sanctuary, and collaborate with agencies, scientists and nonprofits to understand and reduce human disturbances to sensitive seabird colonies along the California coast, including from low overflights.

The Seabird Protection Network seeks to deepen its relationships with the pilot community. So, I'd like to ask you about how they can better connect with pilots in order to make a lasting impact.

Before we begin, I just wanted to mention a couple of things. We would like to audio record the session because we don't want to miss any of your comments. What you say here is confidential – no names will be attached to specific comments in our report. We are also talking with other stakeholders to get their perspectives as well. Is it OK with everyone that we audio record this?

Our session will last no more than two hours, and we will finish by 8:30. Let's begin. We've placed namecards on the table in front of you to help us remember one another's names. Let's find out more about one another by going around the room one at a time. Please tell us your name, your home airport, and how many hours you've flown.

Questions

1. First, we'll focus on what you think when you hear the term "flying seabird-safe." What does that mean to you? Is it a good term to use when the Seabird Protection Network is asking pilots to fly high along the coast?

2. Now, we'll focus on your thoughts about what you might be most interested in hearing from the SPN. Imagine that the Seabird Protection Network is coming to your pilot group to give a presentation about flying seabird-safe.
 - What information would you be most interested in learning about?
3. I have a few questions about promoting the presentations, and I'm interested in your thoughts about presentation titles and descriptions. Here are a few examples.
 - What title and description would you be most excited to come to?
 - Which do you like best? Why?
 - Which of these resonate with you and might encourage you to go to a presentation?

d. How Pilots Can Help Protect Marine Wildlife

California's coast offers pilots unparalleled views of wildlife and scenery. This presentation will introduce you to coastal wildlife and illuminate how pilots can be partners in seabird and marine mammal conservation.

e. Flying the California Coast: Regulations You Should Know

This seminar will introduce you to regulations you should know when you fly the coast, illuminate how low overflights can be problematic for seabird and marine mammal conservation, and ultimately focus on the location of NOAA Regulated Overflight Zones.

f. The Seabird Protection Network Presents Flying Seabird Safe

Learn how to fly seabird-safe along California's coast. This presentation will show you how to identify high concentrations of seabirds and offer tips on how to avoid them when you fly.

4. I will give you a mini-version of a presentation, and I'd love to hear your thoughts. First I'll ask questions about the overall presentation, and then I'd like to hear your thoughts or reactions to each slide.

At the end of the mini-presentation:

- What do you think the main messages of the presentation are?
- The SPN hopes that their presentations communicate the value of flying high along the California coast. Did this mini-presentation convey that message?
- Any suggestions that might help get that across more effectively?
- I'll go quickly through the presentation again, and I'd like to hear your thoughts or reactions to each slide. Are there any particular slides that you thought were especially informative? Any that you thought were not useful?
- What suggestions do you have (for the presentation) that might motivate pilots to commit to keeping their distance from seabird populations/nesting areas?

- What suggestions do you have for messages to avoid?
5. I will show you some examples of core messages that are at the heart of SPN's outreach, and I'd like your thoughts and reactions to each of these. For each core message, think about:
- Does it resonate with you?
 - Do you understand the importance of the message? (Do you understand the importance of doing this? Would it prompt you to commit to flying 1,000' AGL?)
 - Do you have other suggestions for ways SPN can word this? Their goals are for you to feel that it is important to fly high along the coast, that you have a role to play in the protection of these birds, and that you can be partners with SPN and help spread the message.
- Examples
- a: 1000' and above over the California coast – it's seabird safe
 - b: Thank you for flying high over the California coast – it's seabird safe!
 - c. Help seabirds: fly high over the coast.
 - d. Fly above 1000' AGL: it's for the birds.
 - e. Fly at or above 1000' feet AGL for safety and wildlife. It's a good practice!
6. As I mentioned, the SPN is very interested in your ideas of the most effective ways to communicate with pilots. SPN has a number of ways they communicate, including giving presentations to groups, clubs, and associations; through a monthly e-newsletter; having a table at air and boat shows, and through distributing materials such as, maps, tide books, and posters, and give away items such as mugs.
- In your opinion, what are the most effective ways to communicate with other pilots?
 - What publications do you read and pay attention to?
 - Other ideas about how to get the word out?
7. I have one last question. How would you finish the following sentence?
- "I believe that to more fully connect with pilots, so that they want to fly bird-safe, at or above 1000 feet AGL along the California coast, the SPN must..."

Thank you so much for your participation. Please have a safe journey home.

Boater Focus Group (May 17, 2018)

Good evening and welcome to our session tonight. Thank you for taking the time to join our discussion about the Seabird Protection Network. We would like to find out more about how boaters, paddlers, and kayakers feel about sharing the water with wildlife, and your recommendations on ways to better connect with boaters – especially boaters that venture outside the bay. Please remember that there are no right or wrong answers, but rather differing points of view. Please feel free to share your point of view even if it differs from what others have said. Some of you may know more about the Seabird Protection Network than others do. This is a community conversation, and all your thoughts are welcome.

I'll start with a brief summary: The Seabird Protection Network is a program of the Greater Farallones National Marine Sanctuary. They collaborate with agencies, scientists and nonprofits to understand and reduce human disturbances to sensitive seabird colonies along the California coast, including from boaters that get too close.

They accomplish this through partnering with boaters, paddlers, and kayakers, and clubs like Western Sea Kayakers Association on outreach products and presentations targeting the boating community with information about how to 'steer clear of seabirds'

The Seabird Protection Network seeks to deepen its relationships with the boating community. So, I'd like to ask you about how they can better connect with boaters, paddlers, and kayakers in order to make a lasting impact.

Before we begin, I just wanted to mention a couple of things. We would like to audio record the session because we don't want to miss any of your comments. What you say here is confidential – no names will be attached to specific comments in our report. We are also talking with other stakeholders to get their perspectives as well. Is it OK with everyone that we audio record this?

Our session will last no more than two hours, and we will finish by 8:30. Let's begin. We've placed namecards on the table in front of you to help us remember one another's names. Let's find out more about one another by going around the room one at a time. Please tell us your name, the type of boating you do, and where you like to go on the water. For example, if you're a sailor, do you also spend time on powerboats, kayaks, etc.? If you have a boat, tell us a bit about it.

Questions

1. First, I would like to ask your thoughts about what you might be most interested in hearing from the SPN. Imagine that the Seabird Protection Network is coming to your boater group to give a presentation about steering clear of wildlife.
 - What information would you be most interested in learning about?
2. Again, imagine that the Seabird Protection Network is coming to your boater group to give a presentation. They have put together a blurb about the presentation, and I'm interested in your thoughts about presentation titles and descriptions.
 - What title and description would you be most excited to come to?
 - Which do you like best? Why?
 - Which of these resonate with you and might encourage you to go to a presentation?
 - When you read these, what do you expect the presentation to cover?

a. How You Can Help Protect Marine Wildlife

California's coast offers boaters unparalleled views of wildlife and scenery. This presentation will introduce you to coastal wildlife and illuminate how boaters can be partners in seabird and marine mammal conservation.

b. Regulations You Should Know About Boating the California Coast:

This seminar will introduce you to regulations you should know when you boat along the coast, illuminate how boating too close can be problematic for seabirds and marine mammals, and focus on the location of Special Closures in California's Marine Protected Areas.

c. The Seabird Protection Network Presents Boating Seabird Safe

Learn how to steer clear of seabirds on California's coast. This presentation will show you how to identify high concentrations of seabirds and offer tips on how to give them space when you boat or paddle.

3. I will give you a mini-version of a presentation, and I'd love to hear your thoughts. First I'll ask questions about the overall presentation, and then I'd like to hear your thoughts or reactions to each slide. If you have seen one of SPN's presentations like this before, please bear with us.

At the end of the mini-presentation:

- What do you think the main messages of the presentation are?
- The SPN hopes that their presentations communicate the value of giving space to nesting seabird colonies along the California coast. Did this mini-presentation convey that message?
- Any suggestions that might help get that across more effectively?

- I'll go quickly through the presentation again, and I'd like to hear your thoughts or reactions to each slide. Are there any particular slides that you thought were especially informative? Any that you thought were not useful?
 - What suggestions do you have (for the presentation) that might motivate boaters to commit to keeping their distance from seabird populations/nesting areas?
 - What suggestions do you have for messages to avoid?
4. I will show you some examples of core messages that are at the heart of SPN's outreach, and I'd like your thoughts and reactions to each of these. For each core message, think about:
- Does it resonate with you?
 - Do you understand the importance of the message? (Would it prompt you to commit to steering clear of nesting seabird colonies?)
 - Do you have other suggestions for ways SPN can word this? Their goals are for you to feel that it is important to steer clear of nesting colonies along the coast, that you have a role to play in the protection of these birds, and that you can be partners with SPN and help spread the message.

Examples

- a: Steer clear of seabirds on the California Coast.
 - b: Thank you for giving wildlife and seabirds space.
 - c. Help seabirds and wildlife: give them the space they need to feed, breed and rest.
 - d. Keep 1000' from nesting seabirds and wildlife – they need space.
5. Now I would like to show you some of the outreach materials that SPN distributes, such as maps and tide books. For each item, please tell me:
- Is this something you would use?
 - How would you use this? Where would you put it?
 - Which is most useful?
- Small Tidebook
 - Large Tidebook (which one do you prefer and why)
 - ID & Guide for Boaters (waterproof)
- SPN is considering creating these marine-grade stickers for boaters, paddlers, and kayakers to put on their boats or kayaks, as another way to get their message out. Would you be interested in having one of these? Would you put one on your boat or kayak? If not, where would you put it?
6. The Seabird Protection Network is very interested in developing longer-term involvement and partnerships with boating and kayaking clubs and other organizations, as well. Any thoughts or suggestions on what the staff could do to help make that happen, so they are

mutually beneficial? Any thoughts about how SPN can encourage boaters, paddlers, and kayakers to be their allies? [Show the plaque and pilot photos and ask if something like this would be of interest to boaters.]

7. I have one last question. How would you finish the following sentence?
“I believe that to more fully connect with boaters, paddlers, and kayakers, so that they want to steer clear of seabirds along the California coast, the SPN must...”

Thank you so much for your participation. Please have a safe journey home!

Appendix D: Evaluating the Outreach Presentations

The primary objectives of the outreach presentations are the following:

- For audience members to feel that it is important to fly high/steer clear along the coast
- For audience members to spread the message about the importance of flying high/steering clear along the coast
- For audience members to feel that they can be partners with SPN – that they have a role in the protection of these birds

This document outlines suggested evaluation methods that will support the outreach presentations, increase their effectiveness, and improve the program.

Quizdom

The objectives for using the Quizdom handheld devices during presentations are primarily to reiterate the points made during the presentations. They also help to determine how effective SPN's presentation is in the following areas:

1. Eliciting the feeling that it is important to fly high/steer clear along the coast
2. Motivating audience members to spread the message about the importance of flying high/steering clear along the coast
3. Communicating that audience members can be partners with SPN – that they have a role in the protection of these birds

During a presentation to pilot groups, the questions currently asked using the Quizdom handheld devices are:

How many miles have you flown? (*conversation starter question*)

- A) Less than 500,000 miles
- B) More than 500,000 but less than 1 million
- C) More than 1 million
- D) More than 2 million
- E) I don't know but it's probably more than anyone in this room

How often do you fly the California coast? (*Question to gauge the demographics of the audience*)

- A) Never
- B) Rarely
- C) Sometimes
- D) Often

E) Always

How often do you think pilots fly below 1,000' AGL/ASL when flying over the California coast/ocean?

- A) Never
- B) Rarely
- C) Sometimes
- D) Often
- E) Always

When you fly the coast, do you fly over *(Midway through just before explanation of sanctuary)* national marine sanctuaries?

- A) No
- B) Yes
- C) Sometimes
- D) Honestly, I'm not sure

How much do you think low-flying planes (<1000' AGL/ASL) can affect coastal wildlife?

- A) Not at all
- B) Slightly
- C) Moderately
- D) Very
- E) Extremely

How best can pilots contribute to the success of seabird colonies and marine wildlife? *(Midway through, just before explanation of disturbance)*

- A) Be aware of seabird colony locations and avoid direct overflights
- B) Know and abide by locations of NROZs
- C) Fly high along the coast/ocean when safe to do so
- D) All of the above
- E) All of the above, and spread the word

Based on analyzing the comments from the pilot focus group (March 28, 2018), the following revisions are suggested:

- Change the first question to: How many hours have you flown?
 - A) Fewer than 200 hours
 - B) Between 200 and 1,000 hours
 - C) 1,000-2,000 hours

- D) 2,000-3,000 hours
- E) I don't know but it's probably more than anyone in this room

➤ Add a question at the end:

We're almost at the end, and we have one more question for you. Please use your handheld to mark any of the following statements that are true for you:

- A) I feel that it is important to fly at or above 1000' along the coast
- B) I will help spread the word about flying at or above 1000' along the coast
- C) I can be a partner – I have a role to play in the protection of these birds
- D) All of the above

Presentation Debriefs

SPN staff prepared presentation debriefs during the first few months of giving the presentations. Based on analyzing these debriefs, the following set of questions are posed to help guide staff in considering the debriefs:

- How did these assist SPN staff in the early months?
- What did staff learn from them?
- Have staff continued writing them? Are they useful?

Presenter's Logs

The presenter's log (see next page) was developed to provide a simple way to capture the presenter's impressions after a program. They can use the form to note their thoughts immediately after a program, if they have time. The form includes places to jot down questions, initial ideas, responses, possible adjustments, etc. They are similar to the Debriefs, but they provide a place to capture ideas for possible adjustments for future programs, and a place to note actions taken/changes made.

Staff Ideas and Learning: Use the Presentation Debriefs/Presenter's Logs to stimulate and inform discussion at SPN staff meetings. This could include a discussion about ideas, topics, and formats for new programs, and identify how evaluation is used to improve the program and new areas to be explored.

Log for Presenter's Ideas and Comments

Organization/Location _____

Date _____

Point of Contact _____

Number in Audience _____

Key Takeaways/Comments about logistics or program: _____

Audience Questions _____

Ideas, possible adjustments, things to consider for the next program _____

Actions taken (Including date) _____

Results _____

Appendix E: Mini-Outreach Presentations

(Provided Separately)