

Focus Group Questions

Objective Checklist:

[Phase III and IV](#)

Winter 2019

Welcome

NCO Staff Intro - LoriAnne and Erin

Opening statement

We are conducting a review of the work completed during the 2017-2019 funding cycle via our FWS and USA-NPN Partnership. Another 4 year agreement will begin soon. The broad goal of this collaboration is to engage NWRs in monitoring phenology to inform management or engage volunteers or visitors in citizen science, such that there will be useable phenology datasets available for the FWS Inventory and Monitoring Program to answer a range of questions related to climate change.

We recognize that without collaboration between the visitor services and the science and management staff within the refuge system, such a project would not be possible. Thus we, at the National Coordinating Office of the USA-NPN seek to develop relevant materials to foster those relationships and successful implementations of Nature's Notebook for long term use.

This focus group is intended to supplement the online Group Evaluation survey you may have completed for us and is designed to help us better understand your experience in the field. I've put together a few questions for us to discuss over the next hour, which will be used as a guide. We can freely talk about the answers to these, and other questions and statements folks make, and I'd like to make sure that everyone on the call has a chance to provide us with info about their experience. For the most part, we can treat this as a casual discussion. The feedback you give us will help us to develop new resources and we are meeting the needs of refuge staff and volunteers.

Call with Gail Bishop, Gulf Coast Phenology Trail Coordinator, and Ken Lavish, Patuxent Research Refuge Volunteer

Introductions

Gail Bishop

- Gulf Coast Phenology Trail, Trail Coordinator based in Mississippi. Paid as a contractor by the USA-NPN for 10 hours per week. The Trail includes Federal and NGO sites

Reference:

<http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/conduct-focus-groups/main>

- How many years have you been using NN for your Refuge? Trail started 3 years ago; she started in her position a year and 9 months ago

Ken Lavish

- Patuxent Research Refuge NWR in Laurel, Maryland
- Started last year with monitoring. Monitoring phenology of 4 species. Hoping refuge staff will use the data, once they have been collecting for a few years. They also use Project Budburst (PBB) for phenology monitoring. They want to do a phenology walk to try to involve the public and intro phenology to a lot of people.

**For both groups, plans for this year were pushed back because of the Government shutdown.

Why were you inspired to use NN for a phenology monitoring program for your Refuge?

Ken - Public outreach

Gail - Public outreach and management

What is your main reason for using NN? Your long-term goal? Share with us 1-3 things you have done in the last 12 months to move your program toward achieving your long-term goal. What are your plans for using Nature's Notebook with your observers in the next 1-2 years?

Ken: Main reason to start was to introduce public to phenology. Also wanted to learn more about the phenology of invasives (Japanese barberry, garlic mustard) to know when is the best time to apply herbicide. Some of the plants were killed before they could monitor but they found others. Started recorded leafing last year for barberry. Recording on part of the refuge that is not open to the public. Missed the flowering stage at the end of the summer, but found fruits. New plant for them, so still learning the timing of some of the phases. Delivered the data to the refuge biologist from last year, but have not heard if they have used the data. More years of data will be useful. They will be monitoring the same 4 plants this year, looking to expand the plants (for public involvement) will add milkweed, state tree of Maryland (White Oak?) Champion tree that blew down, offspring to be added.

Erin- how do you separate the PBB and NN, since you are using both? Different species are being monitored for each program..Ken compared what is needed in PBB and NN for the same species, similar type of data, though PBB records less detail... may fold some of the data into Nature's Notebook (9 plants on PBB). What is their motivation for using PBB? Started before Ken was there - Refuge manager wanted to do it prior, Ken joined as a monitor, then the PBB

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staff champion left, and Ken got left with it. They have been doing it for 5 years, so Ken is hesitant to stop doing it. Did they ever use the PBB data? No one has ever used the data from PBB at the refuge. Tracking things like the first skunk cabbage spring bloom. Does it make sense to do both programs Ken thinks so. Was an economist and dealt with data.. Continuity is important to him. Wants to keep going because of that - because they started it they should keep going b/c there will be more data. PBB does not have the invasive species on the list. PBB decided not to do invasives.

Erin - what are you hoping to get out of monitoring the state tree and milkweed, etc? Public interest (monarch plight). Many people are planting milkweed and pollinator gardens, monarch waystations. Learning about the lifecycle of the monarch, need for nectar plants throughout the season. Broader view of the ecosystem.

Gail, what are some of the goals for monitoring over the next year or so? They are interested in investigating whether there is an east west gradient in phenology among core plants (yaupon holly, wax myrtle, red maple, red bay). They make sure those plants are present at all sites. Making presentations to the public, school groups (middle school) adjacent to MS Sandhill Crane refuge. Trails closed sometimes, hard to do the program as advertised. Don't always know when the plants will be in phase. Chinese Tallow (non-native/invasive) is something they are tracking; sometimes the refuge staff sprays these plants with herbicide without telling them, so that makes monitoring difficult. Gail is working to increase the number of sites in their region. Wants to add one more county park on the western edge of the trail. Wants to add one more county for a total of 3. They are checking the plants regularly, to determine if there is an east-west gradient of phase occurrence. Sue Wilder, a retired FWS ecologist is their science advisor - she will look at their most recent data for 2018, since they had a full year of making observations. They have started their 2018 annual report (goal for this spring).

How involved are Refuge staff in your program? What role do they play in the program? Do you know how they are planning to use the data?

Ken - who is your biologist? Sandy Spencer. Diana Ogilvie is their volunteer coordinator. How often do you engage with them? Ken - Diana Ogilvie, volunteer coordinator, more than Sandy, they are super busy. Sandy has had one or two other biologists working for her, now just her. Staff at Patuxent is small. Kickoff last Sunday - invite people to participate in PBB and NN, overview of what is happening and what he wants to do this year. Calling it the NN Initiative, a walk with plants that appeal to the public. Programming could be developed for different age groups. Nice areas around the visitor center to select plants and critters that will be easy to observe. Spring beauty bee (not on the list) no success in monitoring - prevalent bee on the

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refuge, according to resident bee researcher. Couldn't find any in the morning.. Too cold. Might need to go later in the day when warmer. We need to add it to our list (Erin will send to Ellen to add). Spring beauty plant (suggested by Sandy). Monitoring season is only about a month b/c it is only a spring event for bee and plant.

Gail - Other than Sue, how involved are the refuge staff on the trail? In LA they want them to participate in special events. See them regularly, but do not seem to have a lot of ownership of the program. Grand Bay NWR has limited staff, so they do not interact much with the Trail activities. Currently working on more education than management. Rebecca Larkins is a refuge staff person, she is still involved. Sue communicates with her a little more than Gail does. Refuge provided funding for materials at the end of the year last year. They also provide space for training and setting up sites.

Erin - Do refuge staff seem interested in the species you are monitoring or in using the data? They just know they are out there often collecting data. Know they are doing the work, but haven't had the conversation about using the data. They are trying to answer some interesting science questions. Maybe after a few years of data collection the trail can present the info to the refuge staff to share what they have data-wise. Their annual report may help advertise the data they have available.

How many people do you regularly engage as observers for data collection? If more than one, describe how you manage those groups. What are their ages?

Ken - who collects the data at your refuge, how many people, and how are they scheduled?
Ken - just him this year, one volunteer. Common problem (even with PBB) people do it for a little while and then stop monitoring. If he doesn't see the data coming in he will follow up with individual volunteers. One volunteer last year dropped out. This year, starting out with just him. 3 of the species are in a closed area, not accessible to the public. One of the species is switch grass so that is easier to monitor. Diana was doing some of the monitoring there. Quite a few people are interested in helping select plants to monitor and helping to develop the species photo guides for the plants (BTW this is a co-created cit sci project). They also participate in nest box project (Cornell Lab). One of the monitors on PBB checks the boxes now. Hopes to do that along with Nature's Notebook, as this would provide good comparison. Ken- seems to be more interest in developing the program, emphasizing the importance of the plants they are monitoring. Switch grass can be used as a biofuel, so emphasizing those things with their annual cycle will get people more involved.

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Erin- in order to recruit more volunteers, how can we advertise why you are monitoring and why people should care/why interesting. Ken - putting the oak on the sample list might help, people will be interested in that. Will hopefully attract a lot of attention when it fruits, etc. Just a few ideas thrown out to group last Sunday. Erin - is talking to people enough or having printed material would be better? Background on the plants would be helpful on paper. Ken and Diana talked about how neither are botanists, and they didn't know when phases were coming, couldn't encourage people to observe, having the why info available and what is interesting will help to engage people.

Erin - Gail - how do you collect your data on the Trail? It depends on the site. This is the second spring they've been working with a biology teacher every Wednesday at the Mississippi Sandhill Crane NWR. 30 kids, 4 groups, 4 leaders including a teacher (1-3 volunteers) collect data once a week. At Grand Bay, they have one designated employee to monitor. Sue is doing a lot of the observations at one site in the SE Louisiana Refuges Complex. Two new volunteers at Bayou Savage. Pretty consistent coverage, get an idea of when things will start to bloom, can compare to what they've seen last year. Printed a brochure paid for with SE LA Complex of Refuges year-end money. Often they are asked to help with special events at Refuge - Sandhill crane festival, etc. Best thing they do at the refuge sites right now is education. Ken would like to see the brochure that Gail made.. She can send the file to him.

Describe how you work with your observers to collect and input data.

Ken - volunteers do the data collection with apps.

Gail - school groups the leaders help with the data collection on paper datasheets, they discuss with the students about the correct answer before deciding what to record, make one data entry on the computer.

Regarding implementing a phenology monitoring program with volunteers, what has worked over the last 2 years?

- What didn't work?
- What do you wish you had to make this even more successful?
- What do you like best about using NN?
- Least?

Ken - needs species guides, would be very helpful. Pictures with the guides describing phases, size, etc. expectations about when a phase might hit. Only a problem during the first year when you are unfamiliar. Need to know more about the botany of the selected plants, scale/sizes, etc. Lessons learned from last year. Request for submitting species guides got them thinking

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about what they'd like to have in the guide. Could add the intensity measures onto the guides, that would be helpful.

Gail - would be nice to have contacts with other people who are successful programs that are working with the refuge. Maybe we can get more refuge staff, volunteers to take part in the Local Phenology Leader COmmunity of Practice. Can think about this for the next phase of the FWS partnership. Need to figure out a way to have people talk to each other that people will use. Have done calls, facebook, listserv, etc. What format would be best? Have us connect people with Gail wants to be able to call/email with people directly. Liz Douglass-Gallagher, Rio Grande Phenology Trail Coordinator, would be a good person for Gail to talk to.

Gail - what does USA-NPN want us to do that will be helpful? Erin - continue to talk to refuge staff as much as you can. We are trying to meet the needs of refuges, document how refuges are using the program and what decisions they are making. Liz shared with Erin a story about VdO used the data the volunteers have been collecting about cliff swallows nesting, to know when to avoid construction to lessen disturbance to the birds. Talking to staff is helpful to us b/c some of that info is not available by just looking at the phenology data.

Do you think data collection with NN is easy or hard? What could be improved?

Sue Wilder with Gulf Coast Phenology Trail wanted to pass along - datasheets don't have info on the intensity bins, so hard to know what to put. Also can't look at past data entered on the app very easily

Ken - doesn't have too much of an issue with it, he and Diane took class with Erin at NCTC and they learned how to use the program there. It was good to learn that the objective of the intensity data was recording the peak in the phenophase. It was also helpful to learn they don't have to answer all questions, and can leave some blank. Basically fine with data collection. Worksheets, etc. Pheno defs not confusing to him, used to it from PBB. There were a few things that threw him off initially but he is familiar now with the phases and what we are asking. Know what they are looking for but not necessarily how it actually looks, etc. for their species, so photo guides would be helpful.

Gail - details for the animal questions, all of the behavior questions (nesting, feeding, etc) are sometimes harder because often they only hear the birds, and don't see them. Has a problem with pollen but records not sure - some plants/flowers are so tiny that she doesn't see them. Likes to put comments in the observation, only one location to record that now. Would be nice to have the site level comments (will be in the new app).

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Do you also use other citizen science programs with your Group in addition to NN?

See Ken's answer above about PBB, Nestwatch. Ken uses Trees Life (NC state univ) at home - looking only at red maples. One observation a year, sends an email and asks about the circumference of the tree, take pictures of it and send them in.

Gail sometimes uses iNaturalist if she sees something that she hasn't seen before, but that's it.

Have you utilized the USA-NPN website and online resources available through the FWS/USA-NPN Portal, such as the Refuge Dashboards? If so, what in particular have you used? What, if anything, have you done to review, analyze, or share data collected with observers in your program?

Ken has not used any of this yet. Has not had time to familiarize himself with the website and info. Erin has helped him out, and he could find the info on the website if he has a question. He learns by making mistakes.

Erin - are the resources that we offer, such as the Refuge Dashboard, in a format that is useful to the refuge staff? Ken - not sure b/c he hasn't looked at it too much. Erin - idea is that the tools on the website are something you can easily use to show the data to the refuge staff. Updated every night so the data is filled in automatically - only need to set it up once. Ken - from just his site or others closeby? Erin -just refuge site, but on our list for the next few years is a phenology trail dashboard to put all sites in your region in one place/page to compare between sites nearby. He thinks this would be quite useful. Would be useful for doing public education and school groups.

Has Gail used the dashboards, shown them to anyone, printed out graphics? Yes, tried to use it for the annual report. Erin helped her out. But she is now planning on working with Sue to use it in the 2018 report.

Is there anything else you'd like to share about your experience with NN?

Ken monitors birds at a few of the sites, maybe needs to use another search method. Decided last year, getting started in NN was easier to start with the plants, especially since they were already doing nest watch and PBB doesn't take very long, not very time consuming. Walking between sites takes the most time. Phenophases for critters seems to be more involved, might take more time.

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Gail - citizen science day is April 13th. We will let people know about it. Will put it in newsletter, scistarter will post all the events on their website. Trying to arrange a field trip for that day to Barataria.

Call with Nicole Menard, Minnesota Valley NWR

Why were you inspired to use NN for a phenology monitoring program for your Refuge?

Still playing catch up on NN side of things. We have a lot of resources available, but she has not had a lot of time to reach out.

What is your main reason for using NN? Your long-term goal? Share with us 1-3 things you have done in the last 12 months to move your program toward achieving your long-term goal. What are your plans for using Nature's Notebook with your observers in the next 1-2 years?

She took the summer short course, and has been doing some of the monthly calls. They don't really have a science question, that she has come across. Not sure about the species chosen, why the trails were set up the way they do.

Last year, started with training, tried to get a number of volunteers involved. There are three trails. There are a lot of species, 20 plus plants at each due to the replicates in individual plants per species. They probably have too many species. She will remove the dandelions, add on one or two of the Nectar Connectors species. This will be new and challenging. At the 3 locations - each has milkweed, also blazing star, Joe pye weed, Coneflower. They are also interested in the Rusty patch bumblebee

People last year really enjoyed the program. They had a list and an "advanced list" which helped participants choose how the level of difficulty.

How involved are Refuge staff in your program? What role do they play in the program? Do you know how they are planning to use the data?

No, that's not her impression, but she is working to change that. Focus was education, getting teachers interested, flesh out their own curriculum. The first tried to engage schools. Didn't really take off, but she is talking with a school teacher now. She has worked as a biologist, but is working as urban biologist now. Bringing info to VS, other staff. Data are getting shared that way, building resilience in climate change. Starting to think more about bumble bee, when do they show up. Management implications - when are we spraying, mowing, etc. Habitat restoration with businesses, schools, etc.

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Big task to manage a program like this. VS could maybe do more with more volunteers.

She is documenting what they are doing. Keeping track of the workflow. Documenting what she did to keep track of the trainings, get everything ready. Action plan was created in the USA-NPN online summer short course for Local Phenology Leaders, and that is very useful in getting her to where she is now.

How many people do you regularly engage as observers for data collection? If more than one, describe how you manage those groups. What are their ages?

5 regulars, out there all the time. 3 others that dabble. Tend to go in pairs to make weekly observations. Tried to do online signup this year, with Signmeup, but it didn't really allow for irregular observations.

Opening it up to the public this year for new observers - will have to train totally new volunteers.

Starting trainings earlier this year, despite slow spring - starting with an intro to the program. Will try to do more field exercises to make sure folks are comfortable.

Describe how you work with your observers to collect and input data.

She goes out at the beginning of the year with volunteers to make sure they are on the same page.

Any feedback on the app? Yes, it's hard to edit observations. This will be taken care of in the new app, due out June 1st.

Will we be prompted to download the new app? Yes, we will make sure this is incorporated into the existing app so that users know the new one is available.

Regarding implementing a phenology monitoring program with volunteers, what has worked over the last 2 years?

People really enjoy being outside, noticing things that they wouldn't notice otherwise. Incidentals are always interesting, a bird flying over. Surprise, details keep them interested. This is their second year. Being able to tell when things are happening.

Do you think data collection with NN is easy or hard? What could be improved?

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People getting hung up on phenophases, figuring out different ways to ballpark numbers of acrons, etc. It would be good to have more resources for this.

Do you also use other citizen science programs with your Group in addition to NN?

They do MJV monarch surveys on the refuge, but also other locations. Vicky Sherry is managing the MJV surveys on the Refuge.

Have you utilized the USA-NPN website and online resources available through the FWS/USA-NPN Portal, such as the Refuge Dashboards? If so, what in particular have you used? What, if anything, have you done to review, analyze, or share data collected with observers in your program?

Haven't set up a Dashboard yet. Milkweed, monarch, bumble bees - when are those appearing. They still need an image for the top of their landing page. They don't have a lot of data yet, so she wasn't sure about how to set up the dashboard. Erin can work on getting that started.

Is there anything else you'd like to share about your experience with NN?

What have other refuges been doing that would be helpful to us? Generating interest with arrival of species (predict when the first sandhill crane will arrive!), changes in phenophases. We also talked about better ways to connect with volunteers and share stories.

She will add one or two species, that might help generate new interest.

Erin will sign her up for Nectar Connectors - that will be a way to get some data summaries to share, put what they are doing in a National context.

Call with Karen Viste-Sparkman, Neal Smith NWR

Why were you inspired to use NN for a phenology monitoring program for your Refuge?

Erin came out to the Refuge for a training - this was a call for workshops from a FWS newsletter. They thought that it was something they could do to engage volunteers in collecting data on the Refuge - citizen science.

What is your main reason for using NN? Your long-term goal? Share with us 1-3 things you have done in the last 12 months to move your program toward achieving your long-term goal. What are your plans for using Nature's Notebook with your observers in the next 1-2 years?

They started out with observations on birds, but it was too difficult for some of their volunteers to identify the birds by call. They switched over to observing more plants, hoping the volunteers

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would be less intimidated. Didn't result in any more volunteers. So maybe they should go back to doing birds!

In their program plan, talked about observing sweet clover, but haven't ended up doing that.

They also talked about prairie violet and fritillary butterfly, but haven't done that yet.

Also doing monarchs - butterfly/milkweed plants - at their prairie site. Blazing star - added last year.

Couple other plants in the oak savannah

Decided to do a plant not on the list - leather flower. Erin will send the species request form.

Too early to use the info. Education component is the best so far, engaging visitors.

How involved are Refuge staff in your program? What role do they play in the program? Do you know how they are planning to use the data?

Staff have lost some interest over time. Limited time and staff. Last year they lost one full time staff person so time and budget are both tight.

How many people do you regularly engage as observers for data collection? If more than one, describe how you manage those groups. What are their ages?

One volunteer comes every 2 weeks. Have a few interns that go out. These interns change over every few months, so not much continuity. Sometimes staff go out too to collect data.

Describe how you work with your observers to collect and input data.

He's using paper datasheets right now. Would be good to have him use the app.

Regarding implementing a phenology monitoring program with volunteers, what has worked over the last 2 years?

Single volunteer - has done some other things for the refuge, but he really loves using NN. He would be a great mentor if they can get more people recruited. He has taken some people out.

Do you think data collection with NN is easy or hard? What could be improved?

Don't think plants are too hard, they just weren't as interested in the plants as they were in the birds.

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Do you also use other citizen science programs with your Group in addition to NN?

Also doing MJV protocol - nectar plants, larva, etc. They are one of the pilot refuges.

Have you utilized the USA-NPN website and online resources available through the FWS/USA-NPN Portal, such as the Refuge Dashboards? If so, what in particular have you used? What, if anything, have you done to review, analyze, or share data collected with observers in your program?

Not sure if the volunteer has looked at it. She hasn't had time to explore.

Any other resources to help recruit, or help volunteers? Yes, Erin will send some of the resources that we have available.

Is there anything else you'd like to share about your experience with NN?

Harder than she thought to keep people involved, except for Steve the one volunteer. Though interns are also doing it.

She thought it would be easier to train vols, keep them interested.

Scheduling was hard, getting people to come out at the right time.

Did training in fall, then they waited until next spring to start obs. This year they should have the training closer to when the observations will start.

Email Communication with Jeannine Kimble, Sevilleta NWR

What is your long-term goal for using Nature's Notebook over the next 2-3 years?

Goal is to help visiting public and new volunteers familiar with when plants and animal activity increases and participation in citizen science.

Do other Refuge staff support the program? Are they interested in the outcome? Do you plan to use the data?

Yes they do support, yes they are - we frequently discuss phenology and to have "hard" data make the story realistic!

Do you use other citizen science programs on your refuge?

Yes, LTER and BEMP!

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Have you used the Refuge Dashboards to share information with visitors, FWS staff, or others?

A few times, wish I had more time to look at the data.

Is there anything that we can provide to help you meet your goals for phenology monitoring?

Not at this time!

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