Quick Start Guide

Planning a New York Phenology Project Monitoring Site

Questions to Ask: Part 1

Do you have:

- An organization committed to: ecology, community participation, restoration and education?

- A site with established trails, gardens or native plantings easily accessible by target populations?

- Staff with interpretive skills dedicated to monitoring, recruiting volunteers and developing resources?

- A volunteer network or a "friends of" network? (This helps to get started quickly, but can be built over time.)

- A monitoring location that can withstand foot traffic and people "handling" the plants?

- Institutional commitment?
    - Is your board on board?
    - Is there a staff person or committed volunteer (or both) to act as site administrator on a continuing basis?
    - Is funding available for signage, supplies, and training?
    - Are benefits to the institution clear? (benefits such as increasing visitors, engaging community, meeting educational standards, developing STEM education, attracting new members)

If you plan to engage community-scientists, do you have:
- Project management capabilities?
    - A volunteer coordinator or someone to serve as site administrator (SA)?
        - Does SA have capacity to manage community events?
        - Can SA collect data at least once a week?
        - Can SA manage social media (not necessary but it helps)?
- Ability to create maps for the site, instructional materials, brochures, etc.?

If you plan to work with schools do you have:
- A target age group?
- An education team that can outline learning outcomes, build curriculum, teach?
- Relationships with a school or schools in your area?
- An outreach team that can talk to students, teachers, principals, superintendents?

Quick Start Guide

Planning a New York Phenology Project Monitoring Site

Before You Launch: Part 2

Crucial Preparation Tasks:

- Be clear about your target audience (Community? School groups? Both?)

- Consider how many people you want as "core observers" and decide how to recruit them

- Know if you have a particular scientific question beyond the New York Phenology Project focus on plant–pollinator interactions (and whether you are monitoring both plants and pollinators/animals)

- Decide whether other activities and content areas will link with this project (i.e. Will you plant a pollinator garden? Will you build bee hotels? Will you engage other organizations to help you get related projects going? What ecological concepts or educational standards will you address?)

- Before you set a launch date make sure you have adequate time to:
    - choose species (See Quick Start Guide, Part 3)
    - choose specific specimens or locations for plants you will monitor
    - mark plant specimens or locations – since it is difficult to ID plants in winter, do this in another season if possible
    - plan one or more trainings for your participants (See Quick Start Guide, Part 4)

- Make plans to:
    - train participants multiple times each season
    - stay in frequent email contact with participants
    - organize gatherings intermittently

- Establish a well-defined budget for materials (i.e., large sign < $200, Smaller herbarium signs ~ $10-$20 per sign, Small tags and flagging: $10-$20 for 60+.) or find sources for donations. Be prepared to replace damaged items and consider whether items will need to be replenished every year.

**You've got a basic outline of what you want to do…
Now build your action plan for the first year:**

Can your staff prepare to launch your project or will you need to engage a consultant to help get you started?

Do you want to launch as a pilot with your staff gathering data or do you want to engage the community right away?

What do you need to do to get your staff//board ready to take on this project?

Quick Start Guide

Planning a New York Phenology Project Monitoring Site

Set dates!
Date of launch:
Date of first training:
Date of follow up training:
(Remember to allow time for all the tasks and decisions that have to happen before launch.)

What needs to be done to get the site ready?

How many species?_____ How many individual plants tagged?:

What staff members will monitor? ______ How many participants do you want to engage?_____

Long-term strategic goals:

First year accomplishment objectives:

How will you assess your project's success?

Choosing Species to Monitor: Part 3

If possible, choose species that:

- Are on the New York Phenology Project species list or USA-NPN (National Phenology Network) list of regional campaign species to allow for regional assessment and comparison.

- Have historical datasets in your region for comparisons across time.

- Are familiar or special to you or your target audience, or offer educational opportunities (i.e. pollinators and their associated plant species)

- Will provide interesting phenophases at seasonally appropriate times for your target audience (i.e. autumn through spring for school groups, summer for summer camps, year-round for community groups)

- Make sure that all species you choose are on the USA-NPN list of species (there are over 1000 species!)

More to consider when choosing species to monitor:

- Choose a small number of species so that volunteers can successfully learn to identify all the phenophases for each. Because each species has different challenges to accurate phenophase identification, it's best to limit the number so that you can help participants know what each phenophase looks like for each species. Don't fall prey to the naturalist urge to track every species – your data collection will become too arduous and you will dread going out!

- For plants, tag three individuals per species, if possible, to capture individual variation. Plants should be close to the trail and have branches you can touch or see closely.

- For animals, think about how you will train participants to correctly identify the species. Insects in particular can be difficult to ID.

- Start five to ten total species and twenty or fewer individual plants in all. Don't overwhelm your participants or yourself in the initial pilot year. You can always add more species or individual in future years.

- Set up your organization's account and list of species on Nature's Notebook before data collection begins.

Tags and signs
Ideally, your trail will have the following components:

- A large, attractive permanent sign at the beginning of your trail that explains the project and provides contact information.

- Smaller arboretum style signs with the name of each species for every tagged individual to help participants locate the plants along the trail. Make sure that these signs can be firmly (semi-permanently) established in the ground, especially in situations where they are likely to be vandalized or removed. Be prepared to buy more signs when they do get removed (or run over by a bike, or a tree falls on them, etc.)

- Small tags or labels directly on each plant depicting its individual ID code. (These codes should be the ones that appear on your data sheets and on your list of species on the Nature's Notebook website). Make sure you affix the tag to a place that is obvious to participants and will not get trimmed back by trail maintenance staff.

- Flags to make the plants more visible – in the heavy growth stage other plants may obscure your plants. If you are flagging in the early spring, consider how much growth will take place around your tagged plants during the growing season. Flags need to be obvious to data collectors, but not be too obnoxious to other trail users. NOTE: Check on the visibility of all flags and signage as the growing season progresses. If needed, move flags and signs or trim back foliage to improve visibility.

Training and Leadership: Part 4

Training:

- Host a training session with visuals such as a PowerPoint or other presentation, samples of your plants, handouts, and species identification cards.
- Educational resources can be found on the New York Phenology Project website.
- The introductory presentation should introduce your project, New York Phenology Project, National Phenology Network, species you will monitor, your datasheet and how to establish a Nature's Notebook account.
- Head to the site and share a meal or snacks together.
- Actually collect data at the site. Each participant should have a datasheet to record phenophases. Encourage participants to ask questions about datasheets, species identification, and phenophase descriptions. Practice more than you think is necessary.
- Follow up through email within a few days and check in regularly.
- Host another training in a few weeks and again in another 6 weeks or so.
- Have a potluck or gathering around a favorite plant phenophase or something of that nature to retain excitement levels about the subject and continue to build community.

Leadership:

- It is necessary to have a site administrator that works at the site (or a really dedicated volunteer that agrees to take on that role) who will collect the same data that participants are gathering and host/organize events. Over time, you can identify and "groom" participants for leadership roles.
- Continue to solicit participant input and be willing to change plants, locations, or volume of data collected to meet your participant needs.
- Be a community builder. Not just formal trainings but potlucks and other social events are important, too.
- Create mechanisms for participants to submit photos or social media posts.
- Have all documents in one location – maps, data sheets, information guides, photo guides. These can be hosted on NYPP's website or your own or both.

- Provide ongoing feedback to participants:
  - Check their data (as well as your own) to ensure data quality and accuracy.
  - Clarify tricky phenophases in training, emails, newsletters, and/or social media to help build participants' skills and accuracy.
  - Give summary presentations at the end of the season to show how much got done and what needs improvement.

- Be "visible" – be available to receive participant feedback and answer their questions.

- Be "invisible" – give credit to others and boast of their accomplishments. Celebrate their participation as often as possible.