**Documentation of Nature’s Notebook v2.10**

(3/10/2022 to 1/26/2023)

*Updated 1/31/2023 by Ellen Denny*

The documentation files in this packet are organized as follows:

**Monitoring guidelines** folder includes a few new materials that were released in 2022:

* A short “Guide to Your First Visit and How to Observe in the Field with *Nature’s Notebook*” was designed to be printed and taken on an observer’s first visit to set up a site, select plants and get started with observations.
* The third module of an online Observer Certification Course was deployed to help observers understand plant and animal life cycles and their associated phenophases. The course will be finished next year. Observers who complete this course will be flagged as “certified observers” in the database.

The Observer Certification Course Module 1 did not change since Nature’s Notebook v2.7 and Modules 2 and 7 did not change since v2.9; Phenophase Photo Guide format and Nature’s Notebook Nugget 5 did not change since Nature’s Notebook v2.6; “Basic Botany and Intensity Estimation” slideshow and scripted video quizzes, Section 1 of the “Phenophase Primer”, Nature’s Notebook Nuggets 9-11, and the “Frequently Asked Questions” webpage did not change since Nature’s Notebook v2.5; “Learn How to Observe with a Group” webpages and Nature’s Notebook Nuggets 6-8 did not change since Nature’s Notebook v2.4; “Learn How to Observe” training videos, the Botany Primer and Nature’s Notebook Nuggets 1-4 did not change since Nature’s Notebook v2.3; training materials for group sites (formerly called “shared sites”) did not change since Nature’s Notebook v2.2; and the monitoring guidelines embedded in our webpages did not change appreciably since Nature’s Notebook v2.1. Thus they are not included again in this v2.10 documentation archive (but can be found in the v2.1, v2.2, v2.3, v2.4, v2.5, v2.6, v2.7 and v2.9 documentation).

**Species** folder includes a list of all species available for monitoring. The format of the species search page and species profile pages did not change from Nature’s Notebook v2.6 (see v2.6 documentation) and thus example screen captures are not included again in this v2.10 documentation archive. For specifics on phenophases and definitions for each species during this period, check the database output that accompanies download of Nature’s Notebook data.

**Registration forms** did not change from Nature’s Notebook v2.1—with the exception of the initial registration process which was streamlined in Nature’s Notebook v2.2. Thus example screen captures are not included again in this v2.10 documentation archive (but can be found in the v2.1 and v2.2 documentation).

**Datasheets** did not change from Nature’s Notebook v2.1 (see the v2.1 documentation) and thus are not included again in this v2.10 documentation archive.

**Mobile apps** did not change from Nature’s Notebook v2.7 (see the v2.7 documentation) and thus are not included again in this v2.10 documentation archive.

Details of what was new in Spring 2022 were outlined on the Frequently Asked Questions page and are included here:

WHAT'S NEW FOR SPRING 2022?

We have added many new plant species and two insects to *Nature’s Notebook*, and revised the “Breaking leaf buds”, “Young leaves” and “Leaves” phenophase definitions to avoid confusion about when a leaf is considered “unfolded”. The **leaf base should be visible** at its point of attachment to the petiole, or if there is no petiole, to the stem. Previously the definitions could have been interpreted to mean the petiole must be visible at its point of attachment to the stem, but that is not required. The phenophases now read:

**Breaking leaf buds:** One or more breaking leaf buds are visible on the plant. A leaf bud is considered “breaking” once a green leaf tip is visible at the end of the bud, but before the first leaf from the bud has unfolded to expose the leaf base at its point of attachment to the leaf stalk (petiole) or stem.

**Young leaves:** One or more young, unfolded leaves are visible on the plant. A leaf is considered “young” and “unfolded” once its entire length has emerged from a breaking bud, stem node or growing stem tip, so that the leaf base is visible at its point of attachment to the leaf stalk (petiole) or stem, but before the leaf has reached full size or turned the darker green color or tougher texture of mature leaves on the plant. Do not include fully dried or dead leaves.

**Leaves:** One or more live, unfolded leaves are visible on the plant. A leaf is considered “unfolded” once its entire length has emerged from a breaking bud, stem node or growing stem tip, so that the leaf base is visible at its point of attachment to the leaf stalk (petiole) or stem. Do not include fully dried or dead leaves.

All the other species and phenophases you are accustomed to are still here, unchanged, and waiting to be observed!