Enhance your classroom with our Discovery Bins!

The Morton Arboretum provides free resources for teachers to borrow and implement in their classroom instruction. Each bin contains materials, tools and lessons to bring NGSS alive in their classroom. Bins are organized by grade-level and are aligned with current field trip offerings. Reserve a bin before or after your trip to extend your student’s learning.

DISCOVERY BINS INCLUDE:

**Tree-ific Tree Bin**

**Grades:** PreK-2nd

Help your students “take root” with this bin. Increase student’s understanding of trees and seeds. This bin includes activities focused on seed growth and dispersal, tree life cycle and habitat characteristics. This bin also provides activities that address the following NGSS:

- K-LS1-1
- 1-LS1-1, 1-LS3-1
- 2-LS2-2, 2-LS4-1

**Animal Discovery Bin**

**Grades:** 2nd – 4th

Examine this hands-on collection of animals’ structures with this bin’s collection of pelts, skull replicas, and x-ray images. This bin includes activities and materials that focus on habitats and adaptations. These materials align with the following NGSS:

- 2-LS2-2, 2-LS4-1
- 3-LS4-3
- 4-LS1-1

**Itty Bitty Science Bin**

**Grades:** 3rd – 5th

Magnify your student’s use of scientific tools with this bin. This bin contains a set of 10 microscopes and pre-made slides. Design your own experiment and have students’ collect their own samples to examine under the microscope. Doing a lab program as part of your field trip? This bin will help you prep your students for how to use a microscope during their visit.

**DISCOVERY BIN DETAILS:**

- Limit 1 bin per teacher for each reservation period.
- Bins can be reserved for 2 weeks at a time.
- Teachers will be responsible for picking up and dropping off these materials.
- Bins will be available for pick-up during normal operational hours. See mortonarb.org for daily hours.
- Bins must be reserved ahead of time. Make a reservation online at: mortonarb.org/learn-experience/educators/classroom-items-loan

**ADDITIONAL QUESTIONS?**

Contact: Megan Kuhl-Horbin
Coordinator of School Programs
mkuhl-horbin@mortonarb.org
(630) 725-2118

**Plant Adaptations Bin – NEW!**

**Grades:** 2nd – 4th

Learn about structural adaptations of plants and how their different characteristics allow them to survive and reproduce. These materials align with the following NGSS:

- 2-LS2-2, 2-LS4-1
- 3-LS3-1, 3-LS3-2, 3-LS4-2, 3-LS4-4
- 4-LS1-1

Turn the page over to view additional bins!
Be a Field Ecologist Bin

**Grades:** 4<sup>th</sup> - 8<sup>th</sup>

Teach your students to be field scientists! This bin includes soil probes, wind meters, light meters and thermometers. Prepare your students for our Eco-Comparison field trip, or create your own classroom experiments with these tools.

Adaptive Aves Bin – **NEW!**

**Grades:** 5<sup>th</sup> - 8<sup>th</sup>

Teach students about animal structures and adaptations using a variety of materials and activities. This bin provides lessons that connect to the following NGSS:
- 5-LS2-1
- 5-PS3-1
- MS-LS1-4
- MS-LS 2-1 & 2-2

Tree ID and Tree Census Bin

**Grades:** 8<sup>th</sup> – 12<sup>th</sup>

Use real data to engage your students in the Urban Tree Census. This bin includes tree identification resources, tree measuring tapes and lessons to bring NGSS alive with real scientific data. This bin provides lessons that connect to the following NGSS:
- MS-LS2-4
- HS-LS2-7

Aquatic Invasive Plants of the Chicago Region

**Grades:** 7<sup>th</sup> – 12<sup>th</sup>

Students will get hands-on experience with handling specimens that scientists use to study and identify species. This box includes aquatic plant specimens of invasive plants and their non-invasive look-alikes, and teaches how they impact ecosystems. This bin connects to the following NGSS:
- HS-LS1-2
- HS-LS4-3
- HS-LS4-5

Tree Health Tool Kit – **NEW!**

**Grades:** 6<sup>th</sup> - 12<sup>th</sup>

This backpack contains materials and activities for you to do with your students to identify and monitor trees in your schoolyard/neighborhood. This backpack connects to the following NGSS:
- MS-LS2-4
- HS-LS2-7