

Field Trip Program: Wonders of Weather

At The North Carolina Arboretum

Students get a first-hand look at technology used in weather monitoring by visiting the Arboretum's own NOAA weather station. Anemometers, thermometers and other instruments are used as student study-groups make weather measurements and predictions in multiple locations to learn about how tree cover and other factors affect temperature and wind speed. As an added bonus, groups get to explore a greenhouse and discover how humans can impact weather indoors in order to grow plants.

Principles:

- Temperature, wind direction, wind speed, cloud cover and precipitation can measure weather quantitatively.
- Tools such as wind vanes, anemometers, thermometers and rain gauges can be used to take weather measurements.
- Energy from the sun warms the land, air and water.
- Precipitation can be found in many forms, including rain, snow, hail and fog.
- Tree cover and stream proximity can alter temperature and moisture levels, which in turn impact plant and animal species that occur in an area.

Duration: 1.5 hours

Cost:

| Participants | Visit Fee | Lunch Fee | Program Fee | Total Cost | Total Cost / Person |
|--------------|-----------|-----------|-------------|------------|---------------------|
| 15-25 | \$65 | \$20 | \$105 | \$190 | \$12.67 to \$7.60 |
| 26-50 | \$65 | \$20 | \$210 | \$295 | \$11.34 to \$5.90 |
| 51- 75 | \$95 | \$20 | \$315 | \$430 | \$8.43 to \$5.73 |
| 76-100 | \$95 | \$20 | \$420 | \$535 | \$7.04 to \$5.35 |
| 101-120 | \$150 | \$20 | \$525 | \$695 | \$6.88 to \$5.79 |

Months Offered: September-May.

NC Science Essential Standards:

Second Grade: 2.E.1.1, 2.E.1.2, 2.E.1.3, 2.E.1.4



Starting Location: In front of the **Education Center** at the program start time (either 9:30 am or 12:00 pm) set upon booking the program. From there, the group will drive together to the **Production Greenhouse** (support facility). Groups arriving early may enjoy the property and facilities.

What do my students need?

Students should wear clothing that is appropriate for the weather. A majority of the program will take place outdoors, so students, teachers and adult chaperones should wear sturdy footwear. Students with accessibility needs are capable of participating in the program. Please notify the Coordinator prior to the day of the program to make any special arrangements.

Want to schedule this program? Contact Katie Gorman, at kgorman@ncarboretum.org or 828-828-567-3165 ext. 219 OR email Mel Henry at mlhenry@ncarboretum.org

Questions about this program? Contact Rich Preyer, Programs Coordinator, at rpreyer@ncarboretum.org or (828) 412-8558 ext. 626