



### **NoMADS Junior Scientists Soil Collection Protocol**

#### Materials:

In sample collection kit:

- Gloves
- Conical collection tube
- Plastic ruler
- Sharpie
- Alcohol swabs
- Metal scoop
- Data Collection Sheet

#### You will also need:

- Pen or pencil
- Smartphone (to access weather and GPS coordinates, and to take pictures of sample site)
- Small shovel or trowel

#### Procedure:

- 1) **Read through all steps before beginning** sample collection to ensure understanding. Reach out to Team Cooke by email with any questions.
- 2) Select a location for your soil sample. Be sure to abide by all the safety requirements and soil content parameters to avoid being disqualified!
- 3) Travel to your chosen location.
- 4) Use a smartphone to determine the GPS location of your selected location. Record it on your data sheet.
- 5) Use a smartphone to determine the local weather and record the air temperature and any other weather conditions in the area. You should also make observations about the weather and record as many details as you can.
- 6) Using your small shovel or trowel, dig a hole with a **minimum depth of 6 inches**. Measure and record the depth of the hole using the provided ruler.
- 7) Put on gloves.
- 8) Remove tube from test kit bag and write the name of your team, the date, and the time of collection on it using the Sharpie.
- Open an alcohol swab and wipe the entire surface of the metal scoop. Allow it to air dry.
- 10)Open the tube.
- 11) Using the metal scoop, fill the tube **at least halfway** with soil from the **bottom** of the hole. Try to avoid roots, mulch, and rocks when you pick up your sample.
- 12) Immediately replace the cap on the tube and close tightly.
- 13) Place the tube containing your soil sample back into the Ziploc bag. Seal the bag.

14) Fill in the rest of the data on the soil collection sheet. Be sure to fill out all fields and include as many details as you can!

## Shipping Instructions:

- 1) Place the Ziploc bag containing your sample tube in the shipping box.
- 2) Place the metal scoop, Sharpie, plastic ruler, and data collection sheet in the shipping box as well we need them back!
- 3) Seal the package and ship or drop off to Team Cooke NoMADS at UNH Manchester.

# **Shipping Address:**

ATTN: Team Cooke NoMADS UNH Manchester 88 Commercial St. Manchester, NH 03101



