Do Now

Lebron didn't hit clutch threes to win the big game when he starting playing basketball. Michelle Obama wasn't popular when she first began going to school. Guess who couldn't throw a spiral to save his life? - Tom Brady. Everyone has to start somewhere.

For the next few classes, we will learn about scientific illustration. Rate yourself on a scale of 1-10 (10 being a top score) of where you think your drawing ability lies now. What number do you hope to be by the end of our drawing classes?

Scientific Illustration

Before photography, **scientific illustration** was an important part of scientific communication. It is still valued now for the detailed and accurate drawings that represent a plant/animal/organism in ways a photograph cannot. There are college programs you can attend to become a science illustrator.

adapted from Wikipedia.com



图版 89 山石橋 Catunaregam spinosa (Thunb.) Tirveng.: 1. 花枝; 2. 部分花冠展开,示雄 表: 3. 總處背面: 4. 部分花萼和繪表,示子房纵切面: 5. 果。(黄少容绘)

BioDivLibrary



Juan Munoz

Colleges offer degrees/majors in Scientific Illustration



Today you are going to be **scientific illustrators** and draw your specific organisms from EcoMUVE. Organisms you might be drawing include:

Botanist: Trillium, Acorn, Shrub

Bird Watcher: Red-Tailed Hawk, Ovenbird, Hooded Warbler

Population Specialist: Wolf & Deer

Public Health Intern: Tick & Small Mammal (deer mouse, squirrel OR rabbit)

How do I draw that?!

Draw lightly so it's easy to erase pencil lines

Tools:

- Sharpened Pencil
- Watercolors & Colored Pencils
- Watercolor Paper
- Brushes & Palette paper
- *Research* Find a reference photo of a forest ecosystem and one of your organisms from the **field guide in EcoMUVE** to observe while you draw. This is the closest we can get to being scientists observing *'in the field'*

Perspective

Imagine you are a tick, a hawk or human. What would the forest ecosystem look like to you?

'Birds-eye view'

'Worms-eye view'

'Zero-point perspective'





Forest Ecosystem

Show a **background**, **middleground** & **foreground**

sketch lightly first to plan the arrangement of trees, shrubs, grass & sky

Make things **proportionate** to each other

Pay attention to the **aesthetic** (design and composition to make things visually pleasing)



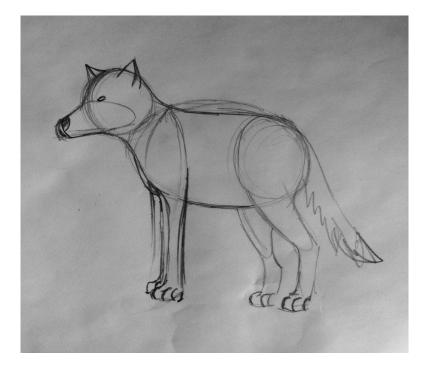
Animals

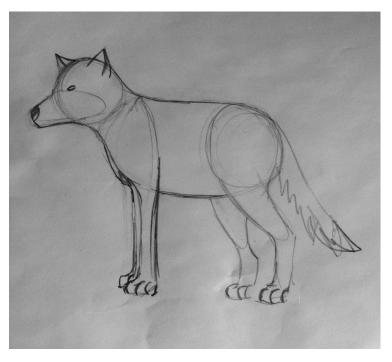
Start with simple shapes

Draw lightly so you don't have to or it is easy to erase

LOOK closely at your organism' s photo - what is the shape of its body, head or other features?

Use **defining lines** to 'connect' shapes to create a more realistic animal









Goals for Scientific Illustration Classes

- 1. **Research** your animals and plants on your computer. **Decide** which images you would like to draw.
- 2. Choose your **perspective**. Draw forest background and your organisms with pencil. Finalize pencil design.
- 3. Use watercolor or watercolor pencils to paint/color drawings in.
- 4. Carefully cut out organisms
- 5. Take photos of cut-outs and upload to your Google Drive.

