



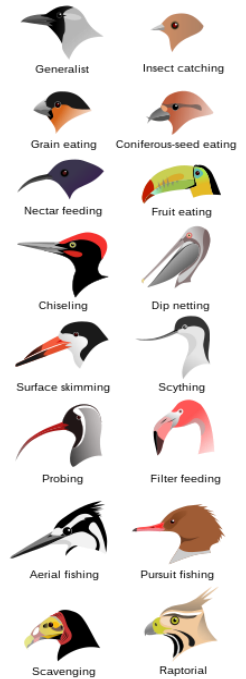
## Adaptations in Flora and Fauna at the Palmer Hay Flats

### Before you go:

- **Watch** Videos: Plants with Weapons: [https://youtu.be/wu\\_9tIK4DWo](https://youtu.be/wu_9tIK4DWo)  
Explore Animal Adaptations: <https://youtu.be/iq63QW8g7jl>
- **Visit** Websites: Alaska Wetlands & Wildlife p 45-54 Wetland Adaptations  
[https://www.adfg.alaska.gov/static/education/educators/curricula/alaskawildlifecurriculum/pdfs/alaskas\\_wetlands\\_wildlife\\_curriculum.pdf](https://www.adfg.alaska.gov/static/education/educators/curricula/alaskawildlifecurriculum/pdfs/alaskas_wetlands_wildlife_curriculum.pdf)
- **Check out:** The bird beak adaptations kit for teachers and students.  
Information about borrowing this kit and more:  
<https://www.adfg.alaska.gov/index.cfm?adfg=educators.teachingkits>

### Gather your tools:

- Binoculars/magnifying glass
- Field Notebook for sketching and taking notes and Pencil
- Bird Beak Kit
- Optional: Camera/video recorder



Not to scale

### At the Palmer Hay Flats:

1. Bird beak activity from ADFG: Different types of birds have different shaped beaks depending on what food they eat. Students will use different tools to pick up different kinds of “bird food” provided in the kit. Look for birds. Notice which beak type they have, and decide what they eat.
2. Discuss: How Do humans adapt to the weather? Adapt to changes in their day to day lives? Are adaptations essential to survival? How do adaptations help organisms survive? Are there any plant adaptations we can identify at Reflections Lake? How can we use our senses(adaptations) to connect to nature?
3. Activities: 1. Guide a blindfolded student to a tree. Ask the student to memorize their tree using senses other than sight. Take the student away from the tree and remove the blindfold. See if they can find their tree. 2. Partner students - one will be the camera and one will be the photographer. The “camera” will close their eyes and be led by the “photographer” to a picture that they want the camera to capture with their eyes. Once the photographer has the “camera” set up where they want it, they tap the “camera’s” shoulder as if they were taking a picture. Camera opens their eyes for about three seconds to briefly capture the image the photographer wants them to see. Repeat this three times. And then swap roles as camera and photographer. If time allows, ask students to draw their favorite “image” they saw when they were the camera. 3. Send students off by themselves (but always within sight of the supervisor!) to find a spot they feel drawn to. Have them sit alone and just observe their special spot. Use their senses to take in their surroundings, find peace, and enjoy nature alone for a moment. Aim for at least 5 minutes of peaceful sit spots and observe your students to determine when they are ready to finish.

### After your Physical Adaptations experience:

Share your learning with others. Post photos on public media, tell your friends and relatives what you saw, what you felt, what you heard, and what you could smell. Show them your notes and sketches.