

Aloha Grade 1 Chaperones,

Mahalo for joining us and assisting me in facilitating today's field science lesson at Waihe'e.

The focus of our study is the wetland area and surrounding dunes and beach as habitat for birds. We will be *carefully and quietly observing* for evidence of birds and working on the science process skill of *recording observations* in the form of a map.

Some of the science ideas and practices that we want to communicate through our discussion with the students today are:

- Help students form questions and use evidence from our observations and prior knowledge to construct an explanation ("I wonder why all of the egrets are heading that way?"...."the egrets are flying in that direction because...")
- Cause and Effect (example: "there is very little water in the pond so that makes me think the water birds are somewhere else.")
- Structure and Function- Plants and animals use their external parts to survive grow and meet their needs. (example: the ae'o have such long thin legs, I wonder how that helps them to survive?")

The goal of this facilitated learning experience is to keep the talking to a minimum and the doing to a maximum. **You can be helpful by:**

1. Reserve side conversations with other adults for another time.
2. Assist students in orientating their maps to our location in the Refuge by finding a few features on the map and pointing them out so they can turn the map in their hands to line up ocean and sand hills accordingly.
3. Model and encourage quiet observation. When birds are sighted, ask what they are doing, what direction they are moving in, do they notice anything about the wing shape or head/beak.
4. Assist students with adding map symbols to their key and making a point on their map where birds are sighted.
5. Make the natural world your focus. Notice the world around you and ask the students about what they notice.
6. Have Fun- our keiki will enjoy and seek out experiences with the natural world if we offer them a model!

Mahalo

Merrill Ranken, STEAM Teacher

NGSS- Next Generation Science Standards

Science and Engineering Practices- Constructing Explanations and Designing Solutions

1.LS1 Structures and Processes

1.LS3 Variation of Traits

Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.

