Santa Clara Valley Audubon Society Wetlands Discovery Program: Curriculum

Pre-program Materials

The pre-program materials are meant to prepare students for the inclass activity stations and field trip. Students will benefit most if all pre-program materials are completed so they understand the topics we are discussing, both in-class and in the field. There are 5 pre-program materials shown below, in a proposed order of completion. *Additional optional materials* are also available on our website: www.scvas.org/wetlands, click on "Program Materials."

- Pre-test:

- Students will complete this *individually* before any material is covered. This provides a baseline against which we can compare their learning. Remind students that we do not expect them to know all of these answers yet – and that it is okay to guess!
- Please help students follow the instructions for each question, but do not give them the answers! They will likely not be able to answer many of these questions on the pretest and that is okay!
- Please do not correct the tests we need to be able to read students' original responses.

- The book, She's Wearing a Dead Bird on Her Head!

• This book explores the origin and history of the Audubon Society in an entertaining way!

"Wonders of Wetlands" Slideshow

Wetlands Vocabulary List

- $\circ\;\;$ A crossword puzzle has been included for use if desired.
- Teachers may also teach the vocabulary through a spelling test, have students write a story using vocabulary, have students draw the words, etc.

- A Set of "Common Birds" Flashcards

 Use these flashcards to teach students about the birds we may see during the field trip! The cards have been divided into 'definite birds' and 'possible birds'; please assign each student a bird from the 'definite birds' pile as it is very exciting when students learn about 'their' bird in class, and then see 'their' bird outside! There are not enough birds for each student to have their own, so three students may be assigned the same bird, depending on class size. Have the students break into groups, read over the flashcards, and discuss their bird. They will be responsible for looking for this bird during the field trip! If you have extra time, feel free to go over the 'possible birds' flashcards with students!

In-Class Activity Stations

This activity takes place on a Tuesday morning around 8:00-8:30AM, and is administered by SCVAS staff and docents. Students will have the opportunity to use what they have learned from the pre-program materials to answer questions on worksheets corresponding to posters that SCVAS provides. Students are then trained to use binoculars so that they will be ready to use them during the field trip.

- 1 session requires approximately 75 minutes (60 minutes of activity stations, 15 minutes of binocular training) for up to about 70 students per session (about 2 classes).
- Students should be in groups of 3 and will work through 9 activity stations throughout the classroom using a worksheet provided by SCVAS.

NGSS

Grade 5

5-PS3-1. Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.

California Common Core State Standards Correlations Grade 5

Reading - Informational

- 1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (NGSS 5-LS1-1) (NGSS 5-ESS3-1)
- 7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (NGSS 5-PS3-1) (NGSS 5-ESS3-1)
- 9. Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (NGSS 5-LS1-1) (NGSS 5-ESS3-1)

Writing

- 1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information. (NGSS 5-LS1-1)
- 8. Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. (NGSS 5-ESS3-1)
- 9. Draw evidence from literary or informational texts to support analysis, reflection, and research. (NGSS 5-ESS3-1)

Speaking and Listening

- 5. Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. (NGSS 5-PS3-1)

Field Trip

This approximately 2-hour field trip takes place on the Thursday and/or Friday morning the week of the in-class activity stations. Each field trip day can accommodate up to 70 students (2 classes). Trips are held at either Palo Alto Baylands or Alviso Marina County Park – location is dependent on teacher preference. Additional adult chaperones (teachers, parents, teachers aides, etc.) are required for each field trip; for a class of 35 students we would ask for at least 4-5 chaperones.

- Students are bused to the field trip site and should arrive at approximately 9:30/9:45AM, already divided into groups of 10-12

- students (group numbers will be confirmed at the in-class portion).
- They will receive a morning snack (which we provide) and then will be given their binoculars.
- Docents take the students on a nature walk around the wetlands, pointing out the local wildlife and discussing the topics covered during the in-class sessions. We return to the bus at \sim 11:45AM and students are generally back on the bus by 12:00PM.

Post-Program

Please complete these materials and send them to SCVAS in order to be eligible for future participation.

- Teacher evaluation form

• Available online or on paper. This helps us to improve the program each year, so your input is extremely valuable!

- Thank you notes

- These thank you notes are a great way for students to express their appreciation and reflect upon their experiences during the field trip.
 - We would like students to write a thoughtful thank you to the docent who led their field trip. Their notes should also include the answers to these questions:
 - 1. What did you like best about the field trip?
 - 2. What do you want to know more about?

- Post-program test

• Same as the pre-test; used to determine how well students grasped the material. Pre-tests must be returned as well.