

# Santa Clara Valley Audubon Society

## Wetlands Discovery Program: Curriculum

### Pre-program Materials

The pre-program materials are meant to prepare students for the in-class 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](http://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 pre-test 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**
  - 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!

## **NGSS**

### **Grade 4**

4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

## **California Common Core State Standards Correlations**

### **Grade 4**

#### Reading - Informational

- 1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- 3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
- 4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
- 7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
- 9. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

#### Reading – Foundational

- 3. Know and apply grade-level phonics and word analysis skills in decoding words.
- 4. Read with sufficient accuracy and fluency to support comprehension.

#### Writing

- 4. Produce clear and coherent writing (including multiple-paragraph texts) in which the development and organization are appropriate to task, purpose, and audience.

#### Language

- 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
- 3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- 6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

## **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 4**

4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

## **California Common Core State Standards Correlations**

### **Grade 4**

Reading - Informational

- 1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

- 3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
- 4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
- 7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

#### Reading – Foundational

- 3. Know and apply grade-level phonics and word analysis skills in decoding words.
- 4. Read with sufficient accuracy and fluency to support comprehension.

#### Writing

- 1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- 4. Produce clear and coherent writing (including multiple-paragraph texts) in which the development and organization are appropriate to task, purpose, and audience.

#### Language

- 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
- 3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- 6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

## 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 ~11:45AM and students are generally back on the bus by 12:00PM.

## **NGSS Standards**

### **Grade 4**

4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

## **California Common Core State Standards Correlations**

### **Grade 4**

#### Language

- 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- 3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- 6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

## 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.

## California Common Core State Standards Correlations

### Grade 4

#### Writing

- 4. Produce clear and coherent writing (including multiple-paragraph texts) in which the development and organization are appropriate to task, purpose, and audience.

#### Language

- Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
- 2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.
- 3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- 6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).