



# Crystal Springs Live!





Thank you for choosing Crystal Springs LIVE!

Crystal Springs Preserve and WaterVentures Florida's Learning Lab are committed to bringing quality environmental education programs to teachers and parents. Our programs are aligned with NGSSS and SNF standards to align with topics taught in classrooms. Each program has been created with the student in mind and conveys important environmental topics in a fun and engaging manner. Additionally, supplemental activities, vocabulary lists, pre/post tests and more are offered to provide an all-encompassing program for students in and out of the classroom.

For those of you unfamiliar with Crystal Springs or WaterVentures, we invite you to explore our websites. ([www.crystalspringsfoundation.org](http://www.crystalspringsfoundation.org) and [www.waterventures.us](http://www.waterventures.us)). Crystal Springs Preserve is a 530-acre living laboratory that is dedicated to bringing directed learning opportunities to visitors through immersion into the pristine habitat of the preserve. WaterVentures was created to extend this learning throughout the state of Florida. As a high-tech mobile learning lab, WaterVentures brings those same fun and engaging environmental programs to schools free of charge. Both are devoted to inspiring guests to be responsible environmental stewards of Florida's precious natural resources.

We hope you enjoy our virtual programs and please do not forget to check out the offerings of Crystal Springs Preserve and WaterVentures!

Happy learning!

## Wonderful Water Birds Pre/Post Test

- 1) What is a watershed?
  - a. Any piece of land that rainwater flows off of
  - b. A shed full of water
  - c. An underground cave full of water
  - d. None of the above
  
- 2) How long is the Hillsborough River?
  - a. 15 miles
  - b. 27 miles
  - c. 54 miles
  - d. 150 miles
  
- 3) In the past 30 years we have lost \_\_\_\_\_ of our shore birds.
  - a. 1/4
  - b. 1/3
  - c. 1/2
  - d. We have not lost any
  
- 4) Some of the reasons for the decline in water bird populations include \_\_\_\_\_.
  - a. Habitat destruction
  - b. Habitat loss
  - c. Changing weather conditions
  - d. All of the above
  
- 5) Cormorants swim under water to catch their food.
  - a. True
  - b. False
  
- 6) The name cormorant means 'sea raven'
  - a. True
  - b. False

- 7) Great Blue Herons can be found in fresh water and saltwater habitats.
- a. True
  - b. False
- 8) Mottled Ducks are not the only dabbling ducks.
- a. True
  - b. False
- 9) Roseate Spoonbills get their pink color from \_\_\_\_\_
- a. Markers
  - b. The crustaceans they eat
  - c. From wading in pink water
  - d. None of the above
- 10) The Ruby Turnstone gets its name from turning things over.
- a. True
  - b. False

## Wonderful Water Birds Pre/Post Test Answer Key

- 1) A
- 2) C
- 3) B
- 4) D
- 5) A
- 6) A
- 7) A
- 8) B
- 9) B
- 10) A

## PRE/POST EXHIBIT DATA SUBMISSION FORM

Date of Program	
School name	
Teacher name	
Number of students taking the Pre-test and Number taking Post-test	
Pre-test average percentage *	
Post-test average percentage *	

\*Scoring all tests, adding up all scores, and dividing by the number of students that took the test will obtain an average percentage.

## Wonderful Water Birds Vocabulary Words

Bill- the beak of the bird. Used for eating, preening, killing prey, fighting, and feeding young.

Buoyant- being able to float in the water.

Colony nesters- a large group of birds that nest in the same area.

Crustaceans- a large arthropod that lives in the water such as shrimp, crabs, and lobsters.

Dabbling Duck- a freshwater duck that typically feeds by dabbling

Diversity- a variety of different species.

Preening- the way a bird grooms its feathers to keep them in good condition.

Shore birds- birds that often frequent the seashore.

Wetland- land that consists of marshes or swamps.



## Wonderful Water Birds Standards

SC.1.L.17.1

SC.2.L.17.1

SC.3.L.15.1

SC.4.L.16.3

SC.4.L.17.4

## Wonderful Water Birds Supplemental Activities- Fill in the blank

Name: \_\_\_\_\_



### Complete the Sentence

Use the words in the list below to complete the sentence

Created on TheTeachersCorner.net Fill-in-the-Blank Maker

1. A watershed is any piece of \_\_\_\_\_ that \_\_\_\_\_ flows off of.
2. Habitat destruction, changing \_\_\_\_\_ conditions, and \_\_\_\_\_ left on the beach are some of the reasons we have lost shore birds.
3. Cormorants swim \_\_\_\_\_ to \_\_\_\_\_ their food.
4. Cormorant means \_\_\_\_\_
5. Anhingas prefer \_\_\_\_\_ water, cormorants prefer \_\_\_\_\_ water.
6. Great Blue Herons have long \_\_\_\_\_ for \_\_\_\_\_ and \_\_\_\_\_ in the water.
7. Mottled ducks are the only \_\_\_\_\_ ducks and it is a close relative to the \_\_\_\_\_ duck.
8. The roseate spoonbill gets its name from the \_\_\_\_\_ it eats and other \_\_\_\_\_ invertebrates.
9. The short-billed dowitcher can be found in wetlands, \_\_\_\_\_ flats, \_\_\_\_\_ areas, \_\_\_\_\_ ponds, and \_\_\_\_\_ fields.
10. When \_\_\_\_\_ black skimmers think they are in danger they will \_\_\_\_\_ down \_\_\_\_\_ to try to go unnoticed.

dabbling juvenile mud underwater land flat sea aquatic flooded catch  
mallard salt rainwater sewage weather crustaceans coastal lay fresh  
raven wading trash legs hunting



## Wonderful Water Birds Supplemental Activities- fill in the blank answer sheet

Name: \_\_\_\_\_



### Complete the Sentence

Use the words in the list below to complete the sentence

Created on TheTeachersCorner.net Fill-in-the-Blank Maker

1. A watershed is any piece of land that rainwater flows off of.
2. Habitat destruction, changing weather conditions, and trash left on the beach are some of the reasons we have lost shore birds.
3. Cormorants swim underwater to catch their food.
4. Cormorant means sea raven.
5. Anhingas prefer fresh water, cormorants prefer salt water.
6. Great Blue Herons have long legs for hunting and wading in the water.
7. Mottled ducks are the only dabbling ducks and it is a close relative to the mallard duck.
8. The roseate spoonbill gets its name from the crustaceans it eats and other aquatic invertebrates
9. The short-billed dowitcher can be found in wetlands, mud flats, coastal areas, sewage ponds, and flooded fields.
10. When juvenile black skimmers think they are in danger they will lay down flat to try to go unnoticed.

dabbling juvenile mud underwater land flat sea aquatic flooded catch  
mallard salt rainwater sewage weather crustaceans coastal lay fresh  
raven wading trash legs hunting



## Wonderful Water Birds Discussion Questions

- 1) Many people enjoy seeing birds in flight and will run towards them in order to make this happen. This causes the birds to fly away using up energy that they otherwise would not have used. Once birds return, they must eat more to restore the energy that was lost during flight. This can be harmful to the birds as they are not always able to find the food they need. What other actions do humans unknowingly do that can cause stress to wildlife?
- 2) What are some positive and negative impacts of changing coastlines on shorebirds?



## Wonderful Water Birds Supplemental Websites/Videos

BFORBALL, 2020

'Water Bird Names with Pictures'

<https://www.bforball.com/kids-water-birds.php>

Audubon, 2019

'Sharing Our Shores'

[http://www.audubonadventures.org/docs/AA\\_Sharing\\_Our\\_Shores.pdf](http://www.audubonadventures.org/docs/AA_Sharing_Our_Shores.pdf)

Audubon & Sibley. D, 2020

'Draw a Bird with David Sibley'

[https://www.audubon.org/sites/default/files/heron\\_sketch\\_steps.pdf](https://www.audubon.org/sites/default/files/heron_sketch_steps.pdf)

Audubon, 2020

'Shorebirds 101: What to Look for When You Hit the Water'

<https://www.audubon.org/news/shorebirds-101-what-look-when-you-hit-water>

City of Sanibel, 2020

'Share the Shore with Shorebirds Conservation'

<https://www.youtube.com/watch?v=eS6EWWByVphs>