

# Amigos de Bolsa Chica Tour/Field Trip Scheduling Packet



If you would like to bring your class, troop or group on an Amigos de Bolsa Chica Wetland Tour, please read through this packet and fill out the following application below. Return the completed form (saved as pdf, scanned, or photographed) to [info@amigosdebolsachica.org](mailto:info@amigosdebolsachica.org), or mail it to Amigos de Bolsa Chica, P.O. Box 1563, Huntington Beach, CA 92647.

1. Teacher/Leader name: \_\_\_\_\_

2. Email address: \_\_\_\_\_

3. Cell phone (for communication on the day of the Wetland Tour): \_\_\_\_\_

4. School/Troop/Group Name: \_\_\_\_\_

5. Street Address, City, Zip: \_\_\_\_\_

6. Number of people attending tour: \_\_\_\_\_

7. Grade (if applicable): \_\_\_\_\_

8. Does anyone on your tour have special needs? If so, please explain.

\_\_\_\_\_

9. What is your preference for field trip date and time of day?

First choice: \_\_\_\_\_

Second choice: \_\_\_\_\_

Third choice: \_\_\_\_\_

Fourth choice: \_\_\_\_\_

10. Type of Tour (check one; types of tours described on page 3):

Footbridge to 1<sup>st</sup> Overlook (1 ½ hours)

Footbridge to Mesa (2+ hours)

11. Specific subject(s) of focus (if applicable, see NGSS topics addressed in the tour on page 5):

\_\_\_\_\_

# Amigos de Bolsa Chica Tour/Field Trip Scheduling Packet



12. Will you require financial assistance for a bus for this Wetland Tour? \_\_\_YES \_\_\_NO  
*Please note that funding is only for Title I schools and we can reimburse up to \$400 for one bus.*

12a. If you answered YES to 12, please attach a letter on school letterhead with information about Title 1 status and ethnic diversity of class (African-American \_\_\_%; American Indian/Alaskan Native \_\_\_%; Asian/Pacific Islander \_\_\_%; Caucasian \_\_\_%; Latino/Hispanic \_\_\_%; Other \_\_\_%). This information is optional, but it helps when applying for grants.

12b. If you answered YES to 12, please provide the contact information requested below. To ensure that we can provide reimbursement for the school bus and do so in a timely manner, we would like the name and contact information for the best person to work with to get an invoice so that we can process the reimbursement request as soon as possible. Because our fund for buses is limited, *if no invoice has been received by May 30 we cannot guarantee that we will be able to process the bus reimbursement.*

Name of contact for bus reimbursement: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

12c. I understand that if this field trip is approved for a funded bus:

- We will reserve and book our own transportation for the Wetland Tour.
- In order to get reimbursed for bus cost (up to \$400), the contact provided above will provide a receipt or invoice to Amigos de Bolsa Chica, P.O. Box 1563, Huntington Beach, CA 92647 OR [info@amigosdebolsachica.org](mailto:info@amigosdebolsachica.org) no later than May 30.

Signature of teacher or contract administrator: \_\_\_\_\_

*An Amigos de Bolsa Chica Docent-led Wetland Tour is free, however, a donation of \$1.00 per person or \$25 minimum is much appreciated and needed to continue providing quality environmental education programs. Donations by check can be mailed to: Amigos de Bolsa Chica, P.O. Box 1563, Huntington Beach, CA 92647, or made online at <http://amigosdebolsachica.org/shop/#special-events-and-tours>*

If you have any questions about your Amigos de Bolsa Chica Wetland Tour or information in this packet, please call 714-840-1575 or email [info@amigosdebolsachica.org](mailto:info@amigosdebolsachica.org).

# Amigos de Bolsa Chica

## Important Tour Information



**Bolsa Chica Wetlands Tour Location:** The tour starts in the South Parking Lot of the Bolsa Chica Ecological Reserve across the street from the entrance to the Bolsa Chica State Beach on Pacific Coast Highway between Warner Ave and Seapoint Dr. Bus parking is available. **See map on last page of this packet.**

### **Types of tours:**

**The Footbridge to 1<sup>st</sup> Overlook Tour** starts on the footbridge where visitors observe underwater life, then continues on to the first overlook and the fill tidal basin. Visitors will see marsh plants and a wide variety of birds. Tours are approximately 1 ½ hours in length.

**The Inner Bolsa Bay to Mesa Tour** starts on the footbridge, stops at the first overlook and continues on to the Bolsa Chica Mesa. The greater distance allows for more exposure to the ecology and history of the Bolsa Chica Ecological Reserve. This tour is 2+ hours covering 1.6 miles round-trip.

**Tour Procedures:** Approximately 1 week before the tour, you will be given the name and phone number of your lead docent, and your contact info will be given to the lead docent.

**Please Arrive On Time.** If there are any issues with arrival time or changes in plans, **you must contact the lead docent.** We understand delays, however, unless forewarned, docents are volunteers and **will only wait 30 minutes beyond the scheduled tour time.** It will be up to the lead docent if the tour will proceed or will need to be rescheduled. The Amigos tries to provide one docent for every 15-20 students.

Amigos de Bolsa Chica docents will greet your group near the bus parking area. Your group will then proceed on a short walk across the walk bridge and, depending on the type of tour you've requested, along the loop trail to the Inner Bay Overlook. Unless you have requested specific topics related to your class's studies, docents will assist in identifying common plants, animals and birds; point out adaptations of the wildlife to the coastal wetland habitat; encourage direct observations; describe endangered species and Bolsa Chica's importance for them; and explain the history from prehistoric times to the present, including the restoration project and conservation plans.

**Tour Group Size:** Limit of 60. **Adult Accompaniment for Children's Tours:** One adult to every ten children is requested.

**Suggested Clothing/What to Bring:** We recommend comfortable walking shoes, jackets (the Bolsa Chica Wetlands can be **windy and cold** throughout the year) and in summer months wear sunscreen and/or a hat. Binoculars are especially useful.

**Facilities:** The only facilities on site are two portable toilets in the parking lot.

**No food is allowed in the Ecological Reserve.**

# Amigos de Bolsa Chica

## Important Tour Information



### Rules to Protect Our Wildlife and Your Children

Please review these two rules with your students **BEFORE** your visit to Bolsa Chica. Teachers, aides and parents are all responsible for ensuring that **children obey the rules at all times** so the entire class or group will have a wonderful experience with nature! Thank you!

#### Rule #1: Respect the wildlife in their home

- Use a quiet voice at all times
- Stay on the trails
- Do not pick any plants
- Do not harm any insects

#### Rule #2: Listen to and obey your tour leader

- Only 1 person talks at a time
- When your tour leader is talking, you listen
- Raise your hand to speak
- Stay behind the tour leader on the trails
- Follow instructions

### How to act at the Bolsa Chica Ecological Reserve:

Instead of this:	Do this:	Why:
shouting	use a quiet voice	We are visitors in the animals' homes. We will see more if we are quiet.
everyone talking	raise your hand to speak	We can share more information with you if only one person talks at a time.
throwing rocks or picking plants	use your eyes to find and watch an animal or plant	We want to protect wildlife.
running	walk gently	We don't want you to get hurt falling.
walking off the trail	stay on the trail	We don't want you to trample or hurt the plants or hidden wildlife.
running away from the group	stay behind the tour leader	We know the trail better than you and don't want you to get hurt or scare away the wildlife.

# Amigos de Bolsa Chica Next Generation Science Standards For Wetland Tours



## Connecting to the Standards

The Ecology information session of the tour supports the following Next Generation Science Standards.

Grade Level	NGSS Citation	Specific Connection
Kindergarten	Living things need water, air, and resources from the land, and they live in places that have the things they need. K-ESS3.A	Explanation of plants and animals present in the salt marsh habitat
First Grade	Develop understanding of how plants and animals use their external parts to help them survive, grow, and meet their needs as well as how behaviors of parents and offspring help the offspring survive. 1-LS1-2	Interactive discussion of plants and animals present in the habitat
Second Grade	Make observations of plants and animals to compare the diversity of life in different habitats. 2-LS4-1	Observation and discussion of living things present in the habitat  Checklist of Animals Commonly seen at Bolsa Chica activity
Second Grade	Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land. 2-ESS2-1	Explanation of the physical setting and zones of the salt marsh
Second Grade	Develop a model to represent the shapes and kinds of land and bodies of water in an area. 2-ESS2-2	Observation explanation of salt marsh ecosystem
Second Grade	Plants depend on water and light to grow. 2-LS2.A	Explanation and discussion of salt marsh plants
Second Grade	Plants depend on animals for pollination or to move their seeds around. 2-LS2.A	Explanation of interactions between living things in the ecosystem

# Amigos de Bolsa Chica

## Next Generation Science Standards

### For Wetland Tours



<b>Third Grade</b>	Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles. 3-LS1.B	Explanation of plants and animals living in the ecosystem
<b>Fourth Grade</b>	Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction 4-LS1.A	Discussion of plants and animals present in the ecosystem
<b>Fourth Grade</b>	Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation. 4-ESS2-1	Observation and discussion of the physical setting and zones of the salt marsh
<b>Fifth Grade</b>	Plants acquire their material or growth chiefly from air and water. 5-LS1.C	Explanation of plants living in the ecosystem
<b>Middle School</b>	Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively. MS-LS1-4	Discussion of plant and animal adaptations to the salt marsh habitat
<b>Middle School</b>	Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms. MS-LS1-6	Presentation of diagrams explaining the salt marsh food chain and energy flow
<b>Middle School</b>	Organisms, and populations of organisms are dependent on their environmental interactions both with other living things and with nonliving actors. MS-LS2.A	Explanation of living and non-living components of the ecosystem
<b>Middle School</b>	Biodiversity describes the variety of species found in Earth's terrestrial and oceanic ecosystems. The completeness or integrity of a ecosystem's biodiversity is often used as a measure of its health. MS-LS2.C	Observation and discussion of living things present in the ecosystem  Checklist of Animals Commonly seen at Bolsa Chica activity

# Amigos de Bolsa Chica Next Generation Science Standards For Wetland Tours



<b>High School</b>	Photosynthesis and cellular respiration (including anaerobic processes) provide most of the energy for life processes. HS-LS2.B	Presentation of diagrams explaining the salt marsh food chain and energy flow
<b>High School</b>	Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem. HS-LS2-4	Presentation of diagrams explaining the salt marsh food chain and energy flow
<b>High School</b>	Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species. HS-LS4-4	Explanation of species present in the ecosystem and changes in the ecosystem over time

## Connecting to the Standards

The Birds information session of the tour supports the following Next Generation Science Standards.

<b>Grade Level</b>	<b>NGSS Citation</b>	<b>Specific Connection</b>
<b>First Grade</b>	Develop understanding of how plants and animals use their external parts to help them survive, grow, and meet their needs as well as how behaviors of parents and offspring help the offspring survive. 1-LS1-2	Explanation of bird adaptations and characteristics  Bird Beaks and Feet worksheet
<b>Second Grade</b>	Make observations of plants and animals to compare the diversity of life in different habitats. 2-LS4-1	Observation and discussion of different birds present in the ecosystem  Checklist of Birds Commonly Seen at Bolsa Chica activity
<b>Third Grade</b>	Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles. 3-LS1.B	Explanation of bird migration and life cycles

# Amigos de Bolsa Chica Next Generation Science Standards For Wetland Tours



<b>Third Grade</b>	Use evidence to support the explanation that traits can be influenced by the environment. 3-LS3-2	Interactive discussion of bird beak evolution
<b>Third Grade</b>	Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. 3-LS4-2	Interactive discussion of bird trait evolution  Bird Beaks and Feet worksheet
<b>Fourth Grade</b>	Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction 4-LS1.A	Explanation of bird adaptations and characteristics  Bird Beaks and Feet worksheet
<b>Middle School</b>	Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms. MS-LS1-5	Explanation of bird adaptations and characteristic evolution
<b>Middle School</b>	Biodiversity describes the variety of species found in Earth's terrestrial and oceanic ecosystems. The completeness or integrity of an ecosystem's biodiversity is often used as a measure of its health. MS-LS2.C	Observation and discussion of different birds present in the ecosystem  Checklist of Birds Commonly Seen at Bolsa Chica activity
<b>High School</b>	Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait. HS-LS4-3	Discussion of bird adaptation and characteristic evolution
<b>High School</b>	Construct an explanation based on evidence for how natural selection leads to adaptation of populations. HS-LS4-4	Discussion of bird adaptation and characteristic evolution



# Amigos de Bolsa Chica Next Generation Science Standards For Wetland Tours



## Connecting to the Standards

The Endangered Species information session of the tour supports the following Next Generation Science Standards.

Grade Level	NGSS Citation	Specific Connection
<b>Third Grade</b>	Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. 3-LS4-1	Explanation of why certain species in the habitat became endangered
<b>High School</b>	Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. HS-LS2-6	Explanation of why certain species in the habitat became endangered  Discussion of endangered birds at Bolsa Chica
<b>High School</b>	Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species. HS-LS4-5	Explanation of why certain species in the habitat became endangered  Discussion of endangered birds at Bolsa Chica

## Connecting to the Standards

The Restoration information session of the tour supports the following Next Generation Science Standards.

Grade Level	NGSS Citation	Specific Connection
<b>Kindergarten</b>	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment. K-ESS3-3	Discussion of what impacts the health of the ecosystem  Information on how to participate in habitat restoration projects

# Amigos de Bolsa Chica Next Generation Science Standards For Wetland Tours



<b>Fifth Grade</b>	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment. 5-ESS3-1	Explanation of how the Bolsa Chica wetland habitat was restored
<b>Middle School</b>	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. MS-ESS3-3	Discussion of human impacts on the Bolsa Chica wetlands  Information on how to participate in habitat restoration projects
<b>High School</b>	Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. HS-ESS3-3	Discussion of the benefits of restoration and advantages of the salt marsh habitat
<b>High School</b>	All forms of energy production and other resource extraction have associated economic, social, environmental, and geopolitical costs and risks as well as benefits. New technologies and social regulations can change the balance of these factors. HS-ESS3.A	Explanation of the history of oil extraction in the Bolsa Chica wetlands
<b>High School</b>	Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. HS-LS2-7	Explanation of how the Bolsa Chica wetland was restored  Discussion of continual habitat restoration needs in the region

[www.amigosdebolsachica.org](http://www.amigosdebolsachica.org)

(714) 840-1574



# Amigos de Bolsa Chica Tours of the Bolsa Chica Ecological Reserve



**NORTH**