



SHEDD AQUARIUM



## Schooling with Shedd

Student and Teacher Programs 2011–2012

### What's Inside...

- › PLAN YOUR SHEDD FIELD TRIP
- › BRING SHEDD TO YOUR CLASSROOM
- › AND DON'T MISS *JELLIES*,  
A NEW SPECIAL EXHIBIT!

# jellies

For a limited time only!

**95 PERCENT WATER,  
100 PERCENT AMAZING.**

That's just the beginning of what you and your students will discover in Shedd's new special exhibit, *Jellies*. These pulsing, translucent animals survive—and thrive—in the world's oceans without bones, blood, or a brain. And while they're beautiful and fragile, sea jellies are also voracious predators that use their venomous tentacles to snare planktonic animals, small invertebrates and even fishes. Your students will find them mesmerizing and mind-boggling at the same time—great for inquiry-based learning! *Jellies* runs through May 2012, but it's already popular, so we recommend that you plan a field trip during the winter, when crowds are smaller and your students can spend time at each of the exhibit's displays and activities.

The *Jellies* teachers guide, available for download at [www.sheddaquarium.org/guides](http://www.sheddaquarium.org/guides), will help you make the most of your students' visit. Key concepts to connect the exhibit to your curriculum include life cycle, movement and diversity. The activities for before, during and after your Shedd field trip will help your students have an engaging, in-depth learning experience.

*Jellies* is generously sponsored by

**Walgreens**

with additional support provided by

James T. Hamman Family  
Maryellen and Richard Keyser  
Bruce K. Lee Family  
Christopher J. Oates Family  
Robert E. Stoettner Family



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# Welcome to the 2011–2012 School Year!



## Shedd Step-by-Step

*Schooling with Shedd* for the 2011–2012 school year makes it easier than ever to plan a field trip to Shedd Aquarium or to schedule one of our outreach programs for your school. The step-by-step process puts all the information you need together. Shedd offers a wealth of hands-on science learning opportunities for your students—and for you, too.

### WE MEET YOUR STANDARDS

Check the Illinois science standards for our curricula at [www.sheddaquarium.org/science\\_standards](http://www.sheddaquarium.org/science_standards). And be sure to visit [www.sheddaquarium.org/education\\_programs](http://www.sheddaquarium.org/education_programs) to find a wide array of educational resources.

# 1

## CHOOSE YOUR EXHIBITS

### The Aquarium Galleries, Caribbean Reef and Amazon Rising

Take a tour of the waters of the world in Shedd's original galleries. They're the perfect place for self-guided explorations. Visit deep, cold oceans, the great rivers of the world, islands and lakes, and our own local waters, filled with native species that colonized glacial meltwaters and non-native newcomers that are changing the Great Lakes ecosystem.

During one of the dive presentations in the 90,000-gallon Caribbean Reef, learn about reef conservation as a diver feeds the fishes and sea turtle.

And watch the water rise as you and your students walk through a year in an Amazon floodplain forest. See who lives where in low-water season, at the height of the floods and as the waters recede. Fishes in trees? People in stilt-leg houses? Everything has adapted to benefit from these floods.



[www.sheddaquarium.org/exhibit](http://www.sheddaquarium.org/exhibit)





**WANT TO LEARN MORE?**

Download teacher and student exhibit guides with focus questions and curriculum connections at [www.sheddaquarium.org/guides](http://www.sheddaquarium.org/guides).



PLAN YOUR  
SHEDD  
FIELD TRIP





## CHOOSE YOUR EXHIBITS (CONTINUED)

### Wild Reef

Take your students diving on a Philippines reef—without ever getting wet! As you explore Wild Reef, you'll go from surf to seafloor, meeting live corals, schooling fishes, eels large and very small, rays and an impressive array of sharks. Your ascent takes you to a lagoon, a dense mangrove and the village of Apo, where citizens made conservation of their reef a community project. See how we raise corals for the exhibits, too.

 [www.sheddaquarium.org/exhibit](http://www.sheddaquarium.org/exhibit)

#### WANT TO LEARN MORE?

Register your k–5 students for Shedd's Coral Reef outreach program. See pages 22–23 for details.



## 1 CHOOSE YOUR EXHIBITS (CONTINUED)

### Abbott Oceanarium

Your students will come face to face with chirping beluga whales, leaping Pacific white-sided dolphins, high-energy Alaska sea otters, a roaring sea lion, giant sea stars and amazingly camouflaged fishes in this Pacific Northwest coastal ecosystem.

Learn more about the marine mammals from our trainers during a 20-minute aquatic show.

In Polar Play Zone, on the lower level, your students can visit the penguins and see the dolphins and belugas under water. Other features are geared for young children. When your class takes part in a learning lab, we'll waive any Abbott Oceanarium exhibit fees.

Aquatic Show powered by Aquatic Show presented by



 [www.sheddaquarium.org/exhibit](http://www.sheddaquarium.org/exhibit)





**WANT TO LEARN MORE?**

Register your 9–12 students for Shedd’s Mission Marine Habitat Learning Lab Program. Go to pages 12–13 for details.



# 2

## CHOOSE YOUR PROGRAM

### On-site Learning Labs for Students

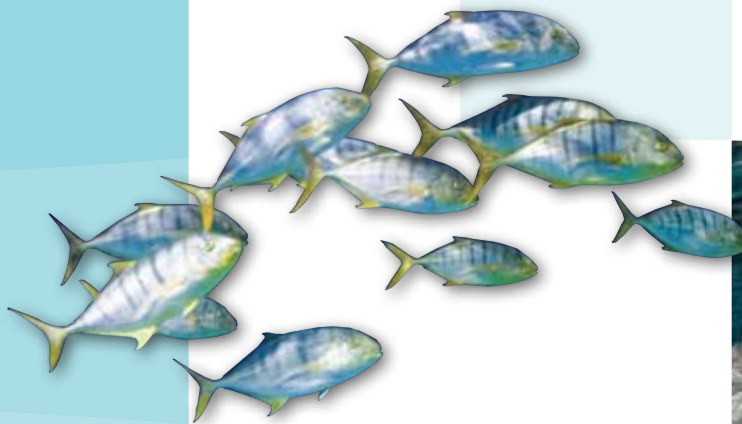
#### GRADES K-5 LEARNING LAB PROGRAMS

Tuesday, Thursday, Friday

50 minutes | Up to 35 students | Fee \$95

Questions about learning lab programs?

Contact [studentprograms@sheddaquarium.org](mailto:studentprograms@sheddaquarium.org)



#### K-2 PROGRAMS

##### ANIMALS IN ACTION

Through observation and action, students compare and contrast the diverse ways in which animals move, discovering connections between animals' actions and their habitats. Students interact with hermit crabs, make predictions about their movement and role-play other specific animal movements.

**KEY CONCEPTS:** adaptations, body parts, form and function

**SKILLS:** comparing and contrasting, observation, predictions, measuring, modeling, motor skills

##### CAMOUFLAGING CRITTERS

Bodies that look like leaves, logs, ice floes and seafloors: Camouflage comes in many shapes and colors. With one of the aquarium animals as a model, students see firsthand the role camouflage plays to help animals function in their habitats. The scientific process comes to life as students observe, predict and report results.

**KEY CONCEPTS:** camouflage, adaptations, habitats, predator/prey relationships, behavior

**SKILLS:** categorization, predictions, modeling, grouping, observation



[www.sheddaquarium.org/learning\\_lab](http://www.sheddaquarium.org/learning_lab)





### HAPPENIN' HABITATS

Discover what makes a home a habitat, both in nature and at Shedd. Meet live animals, examine their homes and compare and contrast habitats in ecosystems around the world. Through investigations and problem solving, students learn how animals use and even share these special places.

**KEY CONCEPTS:** habitats, adaptations, body parts, relationships

**SKILLS:** reasoning, collaboration, observation, inquiry

### ICY ADAPTATIONS

Take a closer look at Shedd's Abbott Oceanarium animals. Students investigate and explore some of the adaptations that enable belugas, sea otters and penguins to survive in their icy habitats.

**KEY CONCEPTS:** adaptations, animal behavior, insulation, anatomy

**SKILLS:** identification, compare and contrast, organize data, teamwork, experimentation, investigation

## 3-5 PROGRAMS

### FISH FILES

Students investigate the characteristics of different fishes and use a magnifying lens for an even closer look at one of them. Using observation and data collection, students conduct experiments to discover why fishes look the way they do and how they are adapted to their surroundings.

**KEY CONCEPTS:** adaptations, body parts, movement, habitats, structure and function

**SKILLS:** data collection, observation, teamwork, presentation, experimentation

### WHALE ADVENTURE

What does it take for a whale to survive? Students step into the shoes of a scientist and, by using tools and experimentation, uncover the many adaptations whales have to survive in diverse and sometimes surprising places.

**KEY CONCEPTS:** adaptations, food web

**SKILLS:** data collection, presentation, identification, experimentation, inquiry, graph interpretation

### REEF RELATIONSHIPS

Examine life in a coral reef ecosystem to discover a complex food web. Students delve into predator-prey interactions to understand the specialized feeding adaptations and behaviors animals need to make a living on the reef.

**KEY CONCEPTS:** adaptations, predator/prey relationships, ecosystems, food webs

**SKILLS:** compare and contrast, collaboration, observation, experimentation

### AMAZON SURVIVAL

Trek into the Amazon flooded forest to discover how the seasonal cycles of high and low water shape life along the river. Students explore what adaptations enable animals—and people—to take advantage of this dynamic environment.

**KEY CONCEPTS:** experimentation, adaptations, form and function, relationships

**SKILLS:** observation, teamwork, collaboration, inquiry, problem solving

## CHOOSE YOUR PROGRAM (CONTINUED)

### On-site Learning Labs for Students

#### GRADES 6-12 LEARNING LAB PROGRAMS

Monday, Wednesday, Friday  
90 minutes | Up to 30 students | Fee \$125

Questions about learning lab programs?  
Contact [studentprograms@sheddaquarium.org](mailto:studentprograms@sheddaquarium.org)

#### 6-8 PROGRAMS

##### EXPLORING ANATOMY: SQUID DISSECTION

Examine the morphology of a squid during a student-driven, hands-on dissection. Students ask questions and work together to answer them by identifying parts of a squid and exploring the many adaptations that help this invertebrate be the predator and not the prey in its habitat.

**KEY CONCEPTS:** adaptations, predator/prey relationships, physiology, anatomy, taxonomy

**SKILLS:** scientific investigation and method, collaboration and communication, teamwork, presentation, inquiry



##### SEA OTTER SURVIVAL

Students take on the roles of Shedd Aquarium staff members to design a sea otter habitat. In this problem-based learning lab, students use hands-on investigation to understand otter diet, behavior and habitat. Using their results, they'll recommend an exhibit design to their classmates.

**KEY CONCEPTS:** ecology, population genetics, biological needs, behaviors, habitats

**SKILLS:** scientific investigation and method, collaboration and communication, data collection and analysis, presentation, inquiry

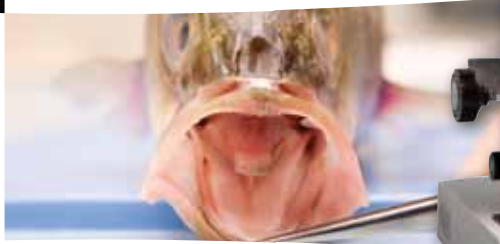
##### GREAT LAKES: PUZZLING POPULATIONS

Behind the scenes at Shedd, students apply problem-based learning to discover why fish populations are declining in the Great Lakes. Students explore exhibit habitats and measure the health of an aquatic system by performing water-quality tests. They are then challenged to use their results to solve the puzzle of the population decline.

**KEY CONCEPTS:** population dynamics, ecosystems, ecological impact, life history, invasive species, human impact

**SKILLS:** scientific method and investigation, collaboration and communication, data collection and analysis, experimentation, prediction





## 6–12 PROGRAM

### LAKESHORE BIOLOGY

On the shoreline of Lake Michigan, students conduct water-quality tests, collect plankton samples and connect the effects of local weather, plants, animals and human residents to the health of our lake. This seasonal program is offered in September, October, April, May and June when weather permits, portions of the class will take place outside.

**KEY CONCEPTS:** ecology, predator/prey relationships, ecosystems, food web

**SKILLS:** scientific investigation and method, data collection and analysis, collaboration and communication, observation, research techniques

## 9–12 PROGRAMS

### EXPLORING PATHOLOGY: FISH DISSECTION

Through a hands-on dissection, students play the role of Shedd's animal health team in this problem-based learning lab. Students use various pathology procedures to diagnose the health of their specimen. Learn how a necropsy can be a vital tool in caring for an animal collection.

**KEY CONCEPTS:** adaptations, physiology, anatomy, pathology, forensics, animal health

**SKILLS:** scientific investigation and method, collaboration and communication, teamwork, inquiry, qualitative and quantitative data collection

## MISSION MARINE HABITAT

Students work in teams charged with designating a marine protected area. Each group must consider the individual needs of multiple marine species. Given scientific tools, students use critical thinking to gather and present data supporting their decisions.

**KEY CONCEPTS:** predator/prey relationships, population dynamics, biological needs, ecosystems, human impact, conservation

**SKILLS:** problem solving, data synthesis and analysis, presentation, collaboration and communication, inquiry

## GREAT LAKES: TESTING THE WATERS

Students go behind the scenes at Shedd and apply problem-based learning to explore an imbalance in a Great Lakes ecosystem. Students explore exhibit habitats and perform water-quality tests. They are then challenged to interpret their results to evaluate the health of the Great Lakes and some of its fish populations.

**KEY CONCEPTS:** invasive species, ecology, ecosystems, human impact, population dynamics

**SKILLS:** scientific investigation and method, collaboration and communication, data collection and analysis, presentation, inquiry

# 3

## CHOOSE YOUR 4-D EXPERIENCE

### Connect Shedd's 4-D Experiences to Your Classroom Curriculum

Our 15- to 20-minute 4-D Experiences educate as they entertain. To help you make the most of these features, we have teachers guides that connect each of Shedd's 4-D Experiences with school curriculum. Topics include climate and seasonal changes in the polar zones and animal adaptations. You'll find engaging activities to do with your students both before and after viewing the 4-D show.



[www.sheddaquarium.org/4-Dguides](http://www.sheddaquarium.org/4-Dguides)

# planet earth

4 - D e x p e r i e n c e



## FROM POLE TO POLE

SimEx!werks  
ENTERTAINMENT

© 2011 BBC/Discovery Channel/NHK co-production, in association with the CBC. PHOTOGRAPHY © FRED OLIVIER



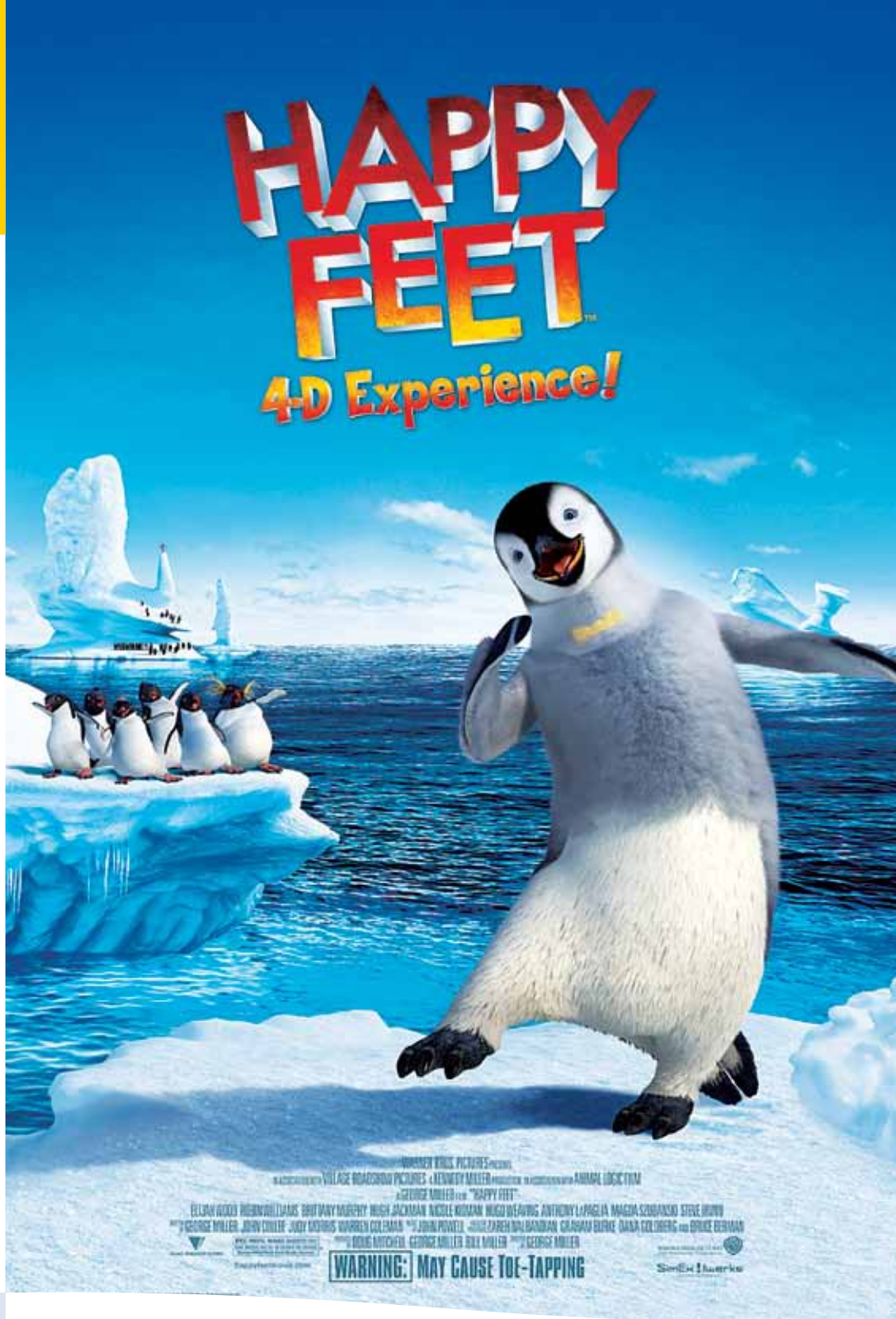
### PLANET EARTH: FROM POLE TO POLE 4-D EXPERIENCE

In this epic 4-D adventure, follow the sun as it touches the lives of creatures across the planet, bringing a fresh understanding of how the world is interconnected.



Learning resource guides for grades K–3 and 4–6 are available at [www.sheddaquarium.org/4-Dguides](http://www.sheddaquarium.org/4-Dguides).

A BBC/Discovery Channel/NHK co-production, in association with the CBC. PHOTOGRAPHY © Fred Olivier



### HAPPY FEET 4-D EXPERIENCE

Tap into adventure with the *Happy Feet* 4-D Experience! Join the journey in amazing 3-D with added special effects as **Mumble** realizes that his toe-tapping talent isn't a burden, but a gift to be treasured — and that his dancing feet may ultimately save his endangered colony!



Learning resource guides for grades K–3 and 4–6 are available at [www.sheddaquarium.org/4-Dguides](http://www.sheddaquarium.org/4-Dguides).

HAPPY FEET: TM & © Warner Bros. Entertainment Inc. (S11)



## DORA & DIEGO'S 4-D ADVENTURE

Join your adventurous amigos in a high-speed chase to protect the animals of the rainforest from Swiper's out-of-control Robot Butterfly!



Learning resource guides for grades pre-K – K are available at [www.sheddaquarium.org/4-Dguides](http://www.sheddaquarium.org/4-Dguides).

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**PLAN YOUR  
SHEDD  
FIELD TRIP**

**4**

**FILL OUT  
THE FORM**

**All field trip reservations must be made with this form at least 30 days before your visit.**

- > No group reservations payments will be accepted at the door.
- > Requested dates and times are subject to availability.
- > Reservations open Aug. 1, 2011.
- > Learning Labs available Sept. 19, 2011, to June 8, 2012.
- > Final payment must be received 14 calendar days before your visit or your reservation will be cancelled.
- > Refunds will be given only if a cancellation is made 14 days before the scheduled visit date.

**SUBMIT  
THE FORM**

**Please fax this form to:**  
312-939-2195  
Attn: Group Reservations

**Questions about registration? Contact**  
[groupreservations@sheddaquarium.org](mailto:groupreservations@sheddaquarium.org).

**ABOUT YOU**

Today's date / /

Name of school or group \_\_\_\_\_

Contact person's full name \_\_\_\_\_

Contact person's work e-mail \_\_\_\_\_

School address \_\_\_\_\_ CPS  Yes  No

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

School phone # \_\_\_\_\_ School fax # \_\_\_\_\_

# of students \_\_\_\_\_ # of chaperones \_\_\_\_\_ Grade(s) of classes \_\_\_\_\_

My school has over 50% free or reduced lunch  Yes  No

Do you need a lunch space? **(Reservations based on availability)**  Yes  No

So that we can better serve your group, please check all that apply:

Bilingual/ESL  Special learning needs  Other

Please describe the above: \_\_\_\_\_

**YOUR VISIT PREFERENCES**

|                        | DATE OF VISIT | TIME OF ARRIVAL | TIME OF DEPARTURE |
|------------------------|---------------|-----------------|-------------------|
| 1 <sup>ST</sup> choice |               |                 |                   |
| 2 <sup>ND</sup> choice |               |                 |                   |
| 3 <sup>RD</sup> choice |               |                 |                   |

**LEARNING LABS AT SHEDD**

| TUES, THURS, FRI<br>(UP TO 35 STUDENTS PER PROGRAM)<br>\$95 PER PROGRAM |   | NUMBER OF PROGRAMS | GRADE LEVEL OF STUDENTS | TOTAL NUMBER OF STUDENTS |
|---|---|--------------------|-------------------------|--------------------------|
| K-2   | Animals in Action                       |                    |                         |                          |
|   | Camouflaging Critters                   |                    |                         |                          |
|   | Happenin' Habitats                      |                    |                         |                          |
|   | Icy Adaptations                         |                    |                         |                          |
| 3-5   | Fish Files                              |                    |                         |                          |
|   | Whale Adventures                        |                    |                         |                          |
|   | Reef Relationships                      |                    |                         |                          |
|   | Amazon Survival                         |                    |                         |                          |
| MON, WED, FRI (UP TO 30 STUDENTS PER PROGRAM)<br>\$125 PER PROGRAM      |   |                    |                         |                          |
| 6-8   | Exploring Anatomy:<br>Squid Dissection  |                    |                         |                          |
|   | Sea Otter Survival                      |                    |                         |                          |
|   | Great Lakes: Puzzling Populations       |                    |                         |                          |
| 9-12  | Exploring Pathology:<br>Fish Dissection |                    |                         |                          |
|   | Mission Marine Habitat                  |                    |                         |                          |
|   | Great Lakes: Testing the Waters         |                    |                         |                          |
| 6-12  | Lakeshore Biology                       |                    |                         |                          |

\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_  
Total number of programs                      Program fees                      Total class/lab fees

## EXHIBIT FEES

| CHECK THE BOXES FOR THE EXHIBITS YOU WOULD LIKE TO SEE.   | EXHIBITS           | IL STATE SCHOOLS    |                    |                                | OUT OF STATE            |
|---|--------------------|---------------------|--------------------|--------------------------------|-------------------------|
|   |                    | ARRIVE BEFORE 10 AM | ARRIVE AFTER 10 AM | CHAPERONES EXCEEDING 1:5 RATIO | STUDENTS AND CHAPERONES |
| <input type="checkbox"/>  | Aquarium Galleries | Free                | Free               | Free                           | \$5.00 pp               |
| <input type="checkbox"/>  | Wild Reef          | Free                | \$6.00 pp          | \$6.00 pp                      | \$6.00 pp               |
| <input type="checkbox"/>  | Abbott Oceanarium  | Free                | \$5.00 pp*         | \$5.00 pp                      | \$5.00 pp               |
| <input type="checkbox"/> Planet Earth <input type="checkbox"/> Happy Feet <input type="checkbox"/> Dora | 4-D Theater        | \$3.50 pp           | \$3.50 pp          | \$3.50 pp                      | \$3.50 pp               |
| <input type="checkbox"/>  | Jellies            | \$3.00 pp           | \$3.00 pp          | \$3.00 pp                      | \$3.00 pp               |

\* When you participate in a student program, the Abbott Oceanarium is FREE. Otherwise, Abbott Oceanarium reservations are \$5.00 a student. Abbott Oceanarium reservations are required to add Jellies to your visit.

### FOR IL SCHOOLS

$$\left( \frac{\text{# of students}}{\text{# of chaperones}} \times \text{Exhibit fees} \right) + \left( \frac{\text{# of chaperones exceeding 1:5 ratio}}{\text{Exhibit fees per chaperone}} \right) = \text{Total exhibit fees}$$

### FOR OUT-OF-STATE SCHOOLS

$$\left( \frac{\text{# of students}}{\text{# of chaperones}} \right) \times \text{Exhibit fees per person} = \text{Total exhibit fees}$$

### TOTAL FEES

$$\text{Total exhibit fees} + \text{Total program fees} = \text{Total fees due}$$

### OPTIONAL CREDIT CARD PAYMENT

Credit card type     Visa     MasterCard     Discover

Name on card \_\_\_\_\_

Card # \_\_\_\_\_ Expiration date \_\_\_\_\_ / \_\_\_\_\_

How do you prefer to receive your confirmation?     Fax     Mail     E-mail

**You will receive a confirmation letter when your reservation is booked. If you have questions about an existing reservation, please e-mail [groupreservations@sheddaquarium.org](mailto:groupreservations@sheddaquarium.org) and be sure to include your confirmation number.**





## TIPS FOR A GREAT FIELD TRIP

Congratulations! You've begun planning your Shedd learning adventure. The checklist will help you prepare for your visit.



### PRE-FIELD TRIP PLANNING

- ❑ April and May are our busiest months. You can avoid large crowds by planning a visit earlier in the year.
- ❑ Share Shedd's website with your students so they know what to expect on the day of their trip.
- ❑ If you plan to bring lunches, you can request a lunch space on the reservation form. Lunchroom reservations are available on a first-come/first-served basis. Please check your scheduled lunchroom and time on your confirmation form. If you do not see a space and time on your confirmation, you do NOT have a reserved space.
- ❑ Locate the bathrooms, lunchroom, education center and other areas of importance on our online map.
- ❑ Create an itinerary for your chaperones and distribute or discuss your plan with them before you depart for Shedd.
- ❑ Print maps for your chaperones and label important locations: exhibits students should explore, bathrooms, the education center, lunchrooms, etc.
- ❑ Watch the teacher orientation video online at [www.sheddaquarium.org/learning\\_resources](http://www.sheddaquarium.org/learning_resources).



### QUESTIONS REGARDING EXISTING RESERVATIONS

- ❑ E-mail [groupreservations@sheddaquarium.org](mailto:groupreservations@sheddaquarium.org) with your confirmation number and question.

### DAY OF ARRIVAL

- ❑ Plan to arrive at Shedd 20 minutes before your first scheduled event.
- ❑ Review the itinerary and expectations with your students and chaperones BEFORE your arrival.
- ❑ Please be seated at least 15 minutes before your aquatic show time and at least five minutes before your 4-D Experience time.
- ❑ Review the pick-up time and location with the bus driver. For parking options, visit [www.choosechicago.com](http://www.choosechicago.com), or contact Standard Parking at 312-235-7701.
- ❑ Have fun!

### POST-FIELD TRIP FOLLOW-UP

- ❑ Allow students to reflect on their field trip and share observations with one another.
- ❑ Facilitate post-trip lessons provided by Shedd staff or SEA online at [www.sheddaquarium.org/lessons](http://www.sheddaquarium.org/lessons).



# 1

## CHOOSE YOUR PROGRAM

### Outreach Programs for Students

#### LARGE-GROUP PROGRAMS GRADES K-5

50 minutes | Up to 250 students

Fee \$255 | Additional mileage charge may apply

Questions about outreach programs?

Contact [outreachprograms@sheddaquarium.org](mailto:outreachprograms@sheddaquarium.org)



[www.sheddaquarium.org/outreach\\_programs](http://www.sheddaquarium.org/outreach_programs)

#### AMAZON: RAISED ON THE RIVER

Solve a riddle about life in the Amazon, and compare the behavior of snakes to the ways people meet their basic needs. Math and reasoning skills will reveal surprising aspects of life along the river. Students will watch exclusive video footage of animals, make decisions about buying supplies, test different fishing nets, build a model floodplain house and simulate a seasonal downpour.

**KEY CONCEPTS:** human-environment interaction, animal habitats, weather/climate

**SKILLS:** observation, comparing, inferring, arithmetic, problem solving



#### PACIFIC NORTHWEST: MAPPING OUT MAMMALS

Distinguish different parts of the Pacific Ocean by learning about the marine mammals that live there. Observation and imitation will show how animals swim and survive in different ways. Students will create a map of the ocean, move their bodies like sea otters, dolphins and belugas, forage for food in different habitats and identify ocean features like kelp forests and icebergs.

**KEY CONCEPTS:** oceanographic diversity, marine mammals, animal movement

**SKILLS:** observation, comparing, classifying, mapmaking

#### CORAL REEF: FEEDING FRENZY

Trace the path of energy in a coral reef from sunlight to producers, primary consumers and predators. Videos and games provide a window into the amazing diversity of fishes and invertebrates on the reef. Students see demonstrations of energy, watch underwater footage of animals, simulate different feeding methods and examine real animal shells and shark jaws.

**KEY CONCEPTS:** energy, food web, biodiversity

**SKILLS:** observation, classifying, understanding systems



### ANIMAL EXTENSIONS

Broaden your students' understanding with this experience designed to complement a large-group outreach program. Shedd educators visit classrooms with a live animal, encouraging students to apply concepts from the large program to something new. This is also an opportunity for more inquiry.

**KEY CONCEPTS:** animal science, taxonomy

**SKILLS:** comparing, inference, memory/recall, generalizing

### PACIFIC NORTHWEST: SWIM LIKE ME

Meet three different marine mammals: sea otters, dolphins and beluga whales. See how they move and what their homes are like. Students see video footage of animals at Shedd and in nature, move like animals, explore simulated environments and record their journey on a map.

**KEY CONCEPTS:** marine mammals, animal movement, habitats

**SKILLS:** observation, mapmaking, recordkeeping

### SMALL-GROUP PROGRAMS GRADES K-2

*25 minutes | Up to 35 students*

*Fee \$95 | \$50 for each additional class  
Additional mileage charge may apply*

*Questions about outreach programs?  
Contact [outreachprograms@sheddaquarium.org](mailto:outreachprograms@sheddaquarium.org)*

### CORAL REEF: TROPICAL TREASURE

Explore the different types of life hiding just beneath the waves in a tropical coral reef. Students learn hand signals used by snorkelers, go on an imaginary dive and use the animals they find to complete a life-sized picture of a coral reef.

**KEY CONCEPTS:** biodiversity, scientific exploration

**SKILLS:** observation, memory/recall, role-playing

### AMAZON: RIVER HOUSE CHALLENGE

Take a journey along the Amazon River, where animals in the canopy help you figure out how to build houses in a flood zone. Students use rain sticks to simulate a rainstorm, search for animals in make-believe canoes and raise a model house on stilts to protect it from a flood.

**KEY CONCEPTS:** human-environment interaction, animal habitats, weather/climate

**SKILLS:** modeling, problem solving



**BRING  
SHEDD  
TO YOUR  
SCHOOL**

# 2 FILL OUT THE FORM

**All outreach reservations must be made with this form at least 30 days in advance.**

- > Outreach programs are offered year round.
- > Outreach programs are available within a 90-mile radius of Shedd Aquarium.

## ABOUT YOU

Today's date / /

Name of school or group \_\_\_\_\_

Contact person's full name \_\_\_\_\_

Contact person's e-mail \_\_\_\_\_

School address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

School phone # \_\_\_\_\_ School fax # \_\_\_\_\_

So that we can better serve your group, please check all that apply:

Bilingual/ESL  Special needs  Other

Please describe the above: \_\_\_\_\_

\_\_\_\_\_

## OUTREACH PROGRAMS AT YOUR SCHOOL

Select a date for our visit to you. Programs are offered Monday, Tuesday, Wednesday, or Thursday only.

Please list more than one choice as dates are subject to availability.

|                        | MONTH | DATE | START TIME(S)<br>EARLIEST 10:00 A.M.<br>LATEST 1:00 P.M. |
|------------------------|-------|------|--|
| 1 <sup>ST</sup> choice |       |      |  |
| 2 <sup>ND</sup> choice |       |      |  |
| 3 <sup>RD</sup> choice |       |      |  |

# 3 SUBMIT THE FORM

**Please fax this form to:**

312-939-2195

Attn: Group Reservations

**Questions about registration? Contact**  
*groupreservations@sheddaquarium.org.*

| \$255 PER PROGRAM  | LARGE-GROUP PROGRAM OPTIONS                   | NUMBER OF PROGRAMS | GRADE LEVEL OF STUDENTS | NUMBER OF STUDENTS PER PROGRAM |
|--|---|--------------------|-------------------------|--------------------------------|
| 100-250 STUDENTS PER PROGRAM<br>50 MINUTES<br>ANIMAL EXTENSIONS* | <b>Amazon:</b> Raised on the River            |                    |                         |                                |
|  | <b>Pacific Northwest:</b> Mapping Out Mammals |                    |                         |                                |
|  | <b>Coral Reef:</b> Feeding Frenzy             |                    |                         |                                |

Animal Extension—\$95 for up to 8 classroom visits on the same day as a large group program

Would you like to add an Animal Extension?  Yes  No

| \$95 FOR FIRST PROGRAM  | SMALL-GROUP PROGRAM OPTIONS             | NUMBER OF PROGRAMS | GRADE LEVEL OF STUDENTS | NUMBER OF STUDENTS PER PROGRAM |
|---|---|--------------------|-------------------------|--------------------------------|
| \$50 FOR EACH ADDITIONAL PROGRAM<br>UP TO 35 STUDENTS PER PROGRAM<br>25 MINUTES | <b>Amazon:</b> River House Challenge    |                    |                         |                                |
|   | <b>Pacific Northwest:</b> Swim Like Me! |                    |                         |                                |
|   | <b>Coral Reef:</b> Tropical Treasures   |                    |                         |                                |

## PROGRAM LOCATION

PLEASE NOTE: All programs must be presented in an indoor room with either a stage or at least 12' x 20' of open floor space.

Please check here that a suitable space will be available [ ]

What type of room will be used?

[ ] Auditorium or theater [ ] Gymnasium [ ] Other (describe below)

---

## PROGRAM FEES

Mileage fee: There is no mileage fee for schools within 20 miles of Shedd Aquarium. For schools farther away than 20 miles, a travel surcharge of \$0.80 will be assessed for each additional mile. The amount will be stated in your confirmation letter.

## PAYMENT OPTIONS

[ ] Check (mail upon receipt of confirmation) [ ] Credit card

## CREDIT CARD PAYMENT

Credit card type [ ] Visa [ ] MasterCard [ ] Discover

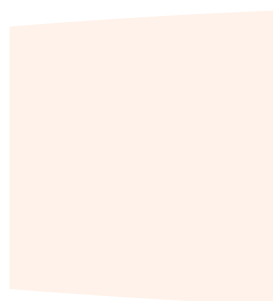
Name on card

---

Card # \_\_\_\_\_ Expiration date \_\_\_\_\_ / \_\_\_\_\_

How do you prefer to receive your confirmation? [ ] Fax [ ] Mail

**You will receive a confirmation letter when your reservation is booked. If you have questions about an existing reservation, please e-mail [groupreservations@shedd Aquarium.org](mailto:groupreservations@shedd Aquarium.org) and be sure to include your confirmation number.**





## PROFESSIONAL DEVELOPMENT

### Teacher Professional Development

Continue your lifelong learning with one of Shedd's professional development opportunities.



Do you have questions about our professional development programs? E-mail [teacherservices@sheddaquarium.org](mailto:teacherservices@sheddaquarium.org) or call 312-692-3165.

Shedd integrates one-of-a kind experiences with science content and pedagogy in programs for K–12 educators. Our philosophy is that people learn science best by doing science. Shedd gives educators the opportunity to learn science content and experience the scientific process firsthand while making relevant curriculum connections for instruction back in the classroom. To explore your professional development and resource options, visit [www.sheddaquarium.org/resources](http://www.sheddaquarium.org/resources) for a full listing of teacher programs offered at Shedd.

Contact [teacherservices@sheddaquarium.org](mailto:teacherservices@sheddaquarium.org) for more information.

*Don't forget: Educators from Illinois, Indiana, Michigan and Wisconsin can visit Shedd free by registering for a pass online at [www.sheddaquarium.org/resources](http://www.sheddaquarium.org/resources).*

#### DAY OF DISCOVERY

In fall 2011 Shedd's partner Discovery Education will have a "Day of Discovery" at Shedd to share its online learning resources with teachers from around Chicago.

Visit [www.sheddaquarium.org/discovery](http://www.sheddaquarium.org/discovery) to learn more.



### CONSERVATION CURRICULUM

Learn how to make conservation curriculum connections any time of year with our new companion teacher resource guides. These guides focus on making connections between the students and the environment. Go to [www.sheddaquarium.org/guides](http://www.sheddaquarium.org/guides) for more details.

Continue your conservation learning this holiday season by taking part in Shedd’s new “Wreath-Cycled” Classroom Challenge. Find out how your classroom can join the challenge to create a recycled wreath to be displayed at Shedd Aquarium in December.

Go to [www.sheddaquarium.org/wreath](http://www.sheddaquarium.org/wreath) to learn more about the contest guidelines, curriculum connections and how your classroom can be involved!

## SAVE THE DATE!

### EDUCATOR OPEN HOUSE

sponsored by **CHASE** | **J.P.Morgan**

Celebrate education and prepare for your school year with Shedd Education on **October 5, 2011.**






Education Department  
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 Chicago, Illinois 60605  
[www.sheddaquarium.org](http://www.sheddaquarium.org)

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**STAFF CONTACTS**

Questions about an existing reservation?  
 Call 312-692-3333 or [groupreservations@sheddaquarium.org](mailto:groupreservations@sheddaquarium.org).

Questions about school programs?  
 E-mail [studentprograms@sheddaquarium.org](mailto:studentprograms@sheddaquarium.org).

Questions about outreach programs?  
 E-mail [outreachprograms@sheddaquarium.org](mailto:outreachprograms@sheddaquarium.org).

Questions about teacher programs?  
 E-mail [teacherservices@sheddaquarium.org](mailto:teacherservices@sheddaquarium.org).

**PREMIER CORPORATE PARTNERS**

