

**Book YOUR PROGRAMS TODAY!**  
aquarium.ucsd.edu  
birchaquariumprogram@ucsd.edu  
(858) 534-7336

# FOUR WAYS TO Explore



## PROGRAM Type

- Discovery Lab
- Beach Teach
- Aquarium Express Outreach

## PROGRAM Feature

- Includes Dissection
- Live Animal Touch

All of our school programs are aligned with the three dimensions of the **Next Generation Science Standards**. See specifics for each program at [aquarium.ucsd.edu](http://aquarium.ucsd.edu).

## At the Aquarium DISCOVERY LABS

Provide your students with NGSS-aligned, hands-on programs led by our educators in one of our aquarium classrooms.

### Available weekdays through June.

See website for pricing. Program price includes same day aquarium admission.

### Program start times:

9:45a.m., 11a.m., 12:15p.m.

**Chaperones** (see website for full chaperone policy): Adults within the ratio of 1:2 for Ages 2-TK and 1:5 for Grades K-12 are free of charge, and will serve as chaperones in the Discovery Lab classroom.

We connect our hands-on lessons to your classroom with pre- and post-Discovery Lab activities available on our website.

## At the Beach BEACH TEACH

Join Birch Aquarium educators for a 2 hour exploration at the Matlahuayl State Marine Reserve (La Jolla Shores).

### Program dates determined by low tides.

See website for pricing and booking requirements. Program price includes same day aquarium admission. **Meets at La Jolla Shores.**

**Chaperones** (see website for full chaperone policy): Adults within the ratio of 1:5 are free of charge, and will serve as chaperones at the beach and in the aquarium.

Don't forget to wear closed-toed shoes that can get wet!

## At Your School AQUARIUM EXPRESS Outreach

Through the generosity of our donors, our Aquarium Express van can travel to your school. Students will experience a variety of hands-on Discovery Labs in the comfort of their own classroom.

**Available through financial aid only.** Submit a financial aid application before requesting your Outreach programs. **Must book a minimum of two sessions per day.**

Book multiple sessions to serve your entire grade!

### At the Aquarium

## SELF-GUIDED VISITS

Explore Birch Aquarium at your own pace without structured programming or instructors.

**Offered daily, year-round during regular aquarium hours.** Pre-registration is required. See website for availability and pricing.

**Chaperones** (see website for full chaperone policy): Adults within the ratio of 1:2 for Ages 2-TK or 1:5 for Grades K-12 are free of charge and will serve as chaperones during the field trip.

## FINANCIAL Aid

Birch Aquarium at Scripps believes that every child should have access to high-quality ocean science education. **Financial aid is available for ALL school programs and to any school group that demonstrates need through responses to our online application.**

### How to Apply:

Please visit the "For Teachers" section of our website to find the application. Applications must be submitted yearly and approved before booking programs. Funds are limited and based on need.

## THANK YOU TO OUR EDUCATION SUPPORTERS

Alan Bonine, Amnon Altman, Candy Barnhill, Cathleen Bourdon and Albert Bourdon, Cecilia Comia, Claudia Lowenstein, Colin McCauley, The Daphne Seybolt Culpeper Memorial Foundation, Inc., Don Raub, Donald Ward and Cheryl Ward, Dr. Ellen J. Lehman & Dr. Charles F. Kennel, George Brabec, Gina Pastega, Jed Miyashiro, The JEM Project, Illumina Corporate Foundation, Lauren Beaudry and Jack Snider, Mary Ann Beyster, Meg Sutherland-Smith and Harry Smith, Merilee Chapin, MUFG Union Bank Foundation, Nordson Corporation Foundation, Paul Tuskes and Ann McGowan-Tuskes, Pincus Family Foundation, Price Philanthropies Foundation, ResMed Foundation, San Diego Foundation, SDG&E, U.S. Bank Foundation, Veerabhadran Ramanathan and Girija Ramanathan

## AGES 2-TK

### MEET & GREET THE SEA\*

Ages 2-TK

Swim, crawl, walk: there are a lot of ways to get around in the sea. Learn how different animals move through play and live animal interactions.

\*Available March-May



Student Max: 24  
Chaperone Ratio: 1:2

## GRADES K-2

### COLOSSAL KELP

Grades K, 1

Dive into the wonderful world of kelp as students learn about the kelp bed habitat and meet the amazing critters that call this underwater forest habitat home.



Student Max: 25  
Chaperone Ratio: 1:5

### TIDE POOL TREASURES

Grades K, 1

Students explore the world of tide pools and learn how tide pool creatures find food, protect themselves and move in this dynamic habitat.



Student Max: 25  
Chaperone Ratio: 1:5

### SANDY SHORES

Grade 2

How does water affect the sandy shore habitat? Students explore what sand is made of, how it is created, and the animals that live in the sand.



Student Max: 25  
Chaperone Ratio: 1:5

## GRADES 3-5

### FISH DIVERSITY

Grade 3

Through hands-on exploration of biofacts and specimens, students will develop an understanding of the roles that adaptations in body shape, coloration, and teeth play in enabling fish to survive in diverse habitats.



Student Max: 36  
Chaperone Ratio: 1:5

### CREATURES OF THE KELP

Grades 3, 5

Discover an underwater forest and its importance to marine organisms. How can changes in the environment affect this ecosystem?



Student Max: 36  
Chaperone Ratio: 1:5

### SENSATIONAL SHARKS

Grade 4

Discover the body structures that have helped sharks thrive in the ocean for millions of years. Students will explore data from local scientists to understand how these adaptations can impact shark behavior.



Student Max: 36  
Chaperone Ratio: 1:5

### FISH OR SQUID DISSECTION

Grades 4, 5

Examine fish or squid inside and out through animal dissection. Grade 4 students will discover the structures that help the animal to swim, eat, and protect itself in the open ocean habitat. Grade 5 students will explore the role of the animal in the food chain based on their body structures and functions.



Student Max: 36  
Chaperone Ratio: 1:5

### TIDEPooling

Grades 4, 5

While exploring local tide pools, students discover what factors affect this habitat and the adaptations of animals that live there. Students learn what makes a healthy tide pool habitat and why this ecosystem is so important.



Student Max: 36  
Chaperone Ratio: 1:5



## GRADES 6-12

### SHARK SCIENCE

Grades 6, 7

For over 50 years, locals have observed the phenomenon of large numbers of Leopard Sharks gathering off of La Jolla. Students become scientists as they explore this phenomenon and understand why sharks are our yearly visitors.



Student Max: 36  
Chaperone Ratio: 1:5

### TIDEPooling

Grades 6-12

Like local scientists, students survey a tide pool to learn more about patterns within this ecosystem. Students collect and analyze data about biodiversity and biomass to better understand this changing habitat.



Student Max: 36  
Chaperone Ratio: 1:5

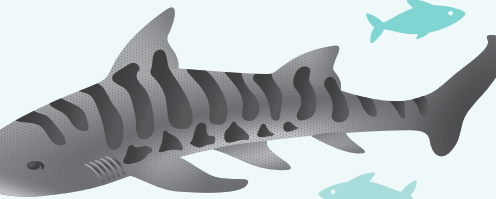
### DIVING INTO DNA

Grade 8

How do scientists use genetics to help seahorses? Through an introduction to gel electrophoresis, students will explore how Birch Aquarium aquarists and Scripps Oceanography scientists work together to create successful breeding plans for seahorses in aquariums around the world.



Student Max: 36  
Chaperone Ratio: 1:5



### FISH OR SQUID DISSECTION

Grades 6, 7, 9-12

As scientists, students use the mackerel or squid as their model subject. Grade 6 students identify animal structures and their functions, and determine the system to which they belong. Grade 7 explores how adaptations of the animal help them avoid predation and compete for resources within their ecosystem. Grade 9-12 deepen the exploration of animal structures and their functions to discuss how the interactions of their systems help the animal survive.



Student Max: 36  
Chaperone Ratio: 1:5

### DEEP SEA DEBRIS

Grades 9-12

Discover how human activity is impacting deep sea ecosystems. Students will collect data on the prey and plastics found in the stomachs of a deep sea predator, the longnose lancetfish, to understand how pollution impacts every part of our ocean planet.



Student Max: 36  
Chaperone Ratio: 1:5

# Explore our OCEAN PLANET

Welcome to the 2022-23 school year programming offered by Birch Aquarium at Scripps Institution of Oceanography, UC San Diego. We are dedicated to providing hands-on, NGSS-aligned programming that connects your students to the ocean, Earth, and atmosphere while developing critical thinking skills.

## MAKE THE MOST OF YOUR PROGRAM.

### BE IN THE KNOW

Visit the "For Teachers" section of our website for more information on programs, policies, and sign up for our teacher e-newsletter.

### FIELD TRIP RESOURCES

Find our new field trip teacher guides and student activity sheets on our website to download and print in advance. Don't forget clipboards and pencils!

### FREE PRE-VISIT FOR TEACHERS

Visit the aquarium free of charge before your scheduled field trip to plan for the day. **Teachers must make a reservation in advance by calling (858) 534-7336.** Any additional guests must make reservations and pay admission.

### BOOK YOUR PROGRAMS TODAY!

We recommend booking early to ensure the dates and times you want! Please note, registration is required at least four weeks in advance.

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Email: [birchaquariumprogram@ucsd.edu](mailto:birchaquariumprogram@ucsd.edu)  
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UC San Diego  
SCRIPPS INSTITUTION OF OCEANOGRAPHY  
**BIRCH AQUARIUM**

**DON'T MISS TEACHER APPRECIATION NIGHT**  
A night just for educators  
Tuesday, October 4, 5-7 p.m.  
Be our guest as you are introduced to the world beneath the waves and the resources available to you through Birch Aquarium at Scripps. Don't miss an encounter with our newest residents in Beyer Family Little Blue Penguins. Register today by visiting the "For Teachers" page on our website.

FALL 2022 to  
SPRING 2023

# Birch Aquarium at Scripps SCHOOL PROGRAMS

Exploring the Science of Our Ocean Planet



Registration  
opens  
August 30

**BIRCH AQUARIUM**

UC San Diego  
SCRIPPS INSTITUTION OF OCEANOGRAPHY