

GUIDED MARINE AND DESERT FIELD EXCURSIONS

ESTERO MORUA EXCURSION

This 3-hour trip to Estero Morua provides students with the opportunity to experience the natural beauty of a typical estuary in the upper Gulf of California ecosystem as well as understand the dynamic nature of the geological processes involved in its formation. Students learn about the ecological role and diversity of organisms that use estuary habitats as well as some of the human uses of and impacts on estuaries.



TIDEPOL EXPLORATION

This 2-hour excursion to the rocky intertidal zone teaches students about the formation of this rocky coquina reef, as well as patterns of intertidal zonation, adaptations to microhabitats as seen in the great diversity of species in the tidepools. Dependent on low tide.



ISLA SAN JORGE CRUISE

This full-day trip to Isla San Jorge provides students with a close-up experience of a large sea lion colony and nesting site for tens of thousands of sea birds. This island is one of the biologically richest habitats in the northern Gulf and students can participate first hand in CEDO research projects at the island. There is also the opportunity to snorkel with sea lions. (Lunch included.)



DUNE DISCOVERY

This five-hour trip involves two hours of walking to and from the dunes. Students will have the opportunity to visit North America's only true sand sea to learn about dune geography and the unique adaptations of its inhabitants, as well as the geologic processes involved in the formation of the basin and range geologic province.



PINACATE VOLCANIC REGION

This full-day excursion to the El Pinacate and gran Desierto Biosphere Reserve takes visitors into the heart of the Pinacate Volcanic range to learn about the geologic processes involved in the formation of the basin and range geologic province, the craters, and the diversity of life that surrounds them.



PARTICIPATE IN CEDO RESEARCH!

MARINE MAMMAL SURVEY

A beach survey conducted locally to quantify marine mammal mortality. 3 hrs.

SPECIES DIVERSITY TRANSECT

An on-going long-term survey of the common flora and fauna in the intertidal zone along a 150-meter transect. Conducted over the course of two to three days, 3 hrs. per day. Requires a team of 8-16 people. Dependent on *extremely* low tide conditions.

BIRD SURVEY

A survey of the birds present in the estuary on any given date to contribute to a database of the resident and migratory species.



INTERCULTURAL PROGRAM



Give students the opportunity to learn about the Mexican culture by experiencing it firsthand. Resident CEDO students can spend a half day visiting a local school, learning alongside their Mexican compañeros. We tailor this activity to each individual group (and age level), and it may include a variety of activities including attending a class, and/or participating in an organized sporting event..

FIELD STATION ACCOMMODATION

The Agustín Cortés building is greek-monastic style architecture with an open courtyard and deck overlooking the Sea of Cortez. This residential facility can accommodate up to 65 people for overnight dormitory style sleeping. All field station residents are asked to contribute to maintaining the natural beauty of the facility by cleaning up after themselves.

Bring a sleeping bag and a pad (sleeping pads are available for up to 50 people). Residents may also sleep on our deck. Please feel free to bring your own tent. Residents have access to our bathhouse with separate men's and women's facilities with hot showers. Bring your own toiletries and towel.

Kitchen and dining facilities can accommodate groups up to 65 people. Groups usually bring their own food (refrigerators are available). CEDO can also provide complete meals. Please inquire about the meal plan when making reservations.

Check out time is 1:00PM.

JOIN CEDO!

As a non-profit operation, CEDO is supported by its users and members. Individuals, students, families, and institutions can become members. We encourage all groups that use the CEDO facility and/or utilize the teaching services that CEDO offers to become members in order to stay informed of CEDO activities. Schools and organizations that use CEDO regularly for teaching or research may find it advantageous to join the consortium of institutions that help support CEDO. E-mail or call for more details. E-MAIL: info@cedointercultural.org FAX/TEL: 520-320-5473

FEES AND PAYMENT

RESIDENT FACILITY FEES

Minimum group size = 5 persons

All groups must make reservations and **pay both institutional and individual user fees NIGHTLY**. All fees are in U.S. Dollars and are discounted for institutional members.

*INSTITUTIONAL FEE:

(waived for institutional members)
for groups up to 15: \$ 100.00 per night
for groups of 16-30: \$ 200.00 per night
for groups of 30+: \$ 250.00 per night

*INDIVIDUAL DORM FEE (nightly): \$10.00/person

*INDIVIDUAL LAB FEE (daily): \$5.00/person
(Contact CEDO for Researchers fees)

DAY-USE FACILITY RENTAL FEES

Courtyard, audio visual center, conference room, and library available for rent. Contact CEDO for further details.

TEACHING FEES

	RESIDENT	NONRESIDENT
Slide show.....	\$ 75	\$100
Field Excursion	\$100	\$150
Full Day Teaching (2 field excursions & 1 slide show or Pinacate or Dunes excursion).....	\$250	\$300

PAYMENT

A nonrefundable reservation fee in the amount of one night's institutional fee is required to confirm your reservation and applies toward the group's total fees. The balance should be paid with cash, check, or money order upon receipt of the CEDO invoice. Make checks out to: CEDO Inc.

TO MAKE RESERVATIONS:

CONTACT US AT:

CEDO, Inc.
P.O. Box 44208
TUCSON, AZ 85733

E-MAIL: info@cedointercultural.org

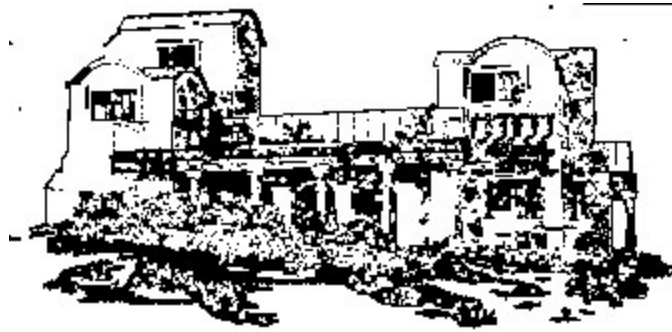
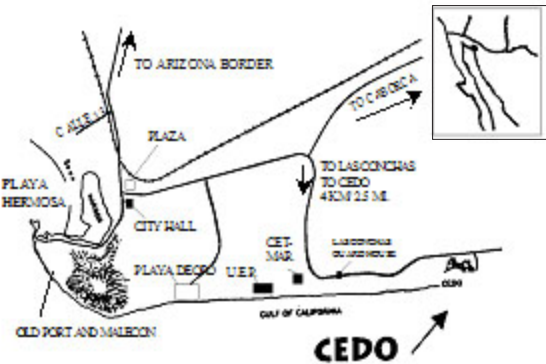
FAX AND TELEPHONE (IN THE USA):
520-320-5473

PRIORITY IN RESERVATIONS IS AS FOLLOWS: RE-SEARCHERS AND MEMBER INSTITUTIONS, EDUCA-TIONAL GROUPS, ALL OTHER GROUPS.

MAKE RESERVATIONS BY E-MAIL, PHONE, OR MAIL AT LEAST SIX MONTHS IN ADVANCE TO ENSURE AVAILABILITY.

DIRECTIONS

FROM LUKEVILLE, AZ / SONOYTA, SONORA BORDER CROSSING STATION: FOLLOW SIGNS FOR PUERTO PEÑASCO (HIGHWAY 8). PEÑASCO IS APPROXIMATELY 60 MILES SOUTH OF SONOYTA. IN PEÑASCO: CROSS RAILROAD TRACKS. GO LEFT AT NEXT STREET LIGHT (FREEMONT BLVD.). GO ~1.5 MILES TO THE ENTRANCE TO LAS CONCHAS HOUSING DEVELOPMENT. THERE IS A PEMEX GAS STATION ON THE LEFT AND A PAVED TURN OFF ON THE RIGHT INTO LAS CONCHAS. AFTER THE LAS CONCHAS GUARD HOUSE, CEDO IS LOCATED 1 MILE ON THE RIGHT.



CEDO

FIELD STATION PROGRAMS



THE INTERCULTURAL CENTER FOR THE STUDIES OF DESERTS AND OCEANS PUERTO PEÑASCO, SONORA, MÉXICO

The Intercultural Center for the Studies of Deserts and Oceans (CEDO) is a field research station and education center with a mission to advance and share knowledge about the Upper Gulf of California and surrounding Sonoran Desert, and to promote conservation and sustainable use of its natural and cultural resources. Jointly operated by Mexican and U.S. non-profit foundations, CEDO implements research, science education, as well as conservation programs and materials for a diverse public.

CEDO is located just east of Puerto Peñasco, Sonora, Mexico, a region which offers a variety of natural habitats for study.

NATURAL RESOURCES IN PUERTO PEÑASCO:

The northern Gulf of California is an area of extreme temperatures, salinity, and tides (23 ft. maximum). Many unique organisms have adapted to these conditions, some with seasonal cycles of abundance.

On the edge of the Upper Gulf of California and Colorado River Delta Biosphere Reserve, rocky intertidal habitats (with beachrock, granite and basalt substrates) and sandy beaches dominate the landscape surrounding Puerto Peñasco. Several negative estuaries (esteros) are located on the outskirts of town. Thirty miles to the north lies the Pinacate Biosphere Reserve with dormant volcanoes, lava fields and craters.

All of these habitats are readily accessible from the CEDO facility.

CEDO FACILITIES:

- CEDO is a multi-use facility open to the public, visiting classes, and other groups. CEDO functions primarily as a field station for the exploration of local habitats, but it also provides the following resources to enhance studies of the area.
- Edificio Agustín Cortes
 - Henry Harris Memorial Library: books and articles in both Spanish and English emphasizing the upper Gulf of California and surrounding Sonoran Desert.
 - Reference collections of local flora and fauna.
 - Laboratory: Dry and wet lab space, aquaria, and microscopes.
- Visitor's Center
 - Gift and Book store with local field guides, tide calendars, T-shirts etc. in a unique "Earthship" construction
 - Exhibits: 55-ft. fin whale skeleton and as well as fisheries and historical displays.

IN THE FIELD



A group of students identify species in the intertidal zone, helping with one of our on-going research projects. For more information about this project and others, please see the "Participate in CEDO Research" section of this brochure.

CEDO TEACHING SERVICES:

The CEDO Team welcomes student and tourist groups of all ages and offers the following teaching services to enhance your study of this ecologically distinct area:

- *Slideshow Lectures*
- *Guided Marine and Desert Field Excursions*
- *Research Participation.*
- *Intercultural Program*

SLIDESHOW LECTURES:

- Introduction to Puerto Peñasco Natural History
- Estuary Life
- Intertidal Life
- (the above 3 presentations can be combined into one)
- Pinacate Volcanic Region
- Marine Mammals
- Biosphere Reserves and conservation in the upper Gulf of California
- Custom presentations available

CEDO Intercultural

The Intercultural Center for the Study of Deserts and Oceans, Inc.