



Laguna San Ignacio Ecosystem Science Program

A Project of the Ocean Foundation in Baja California Sur, Mexico

Gray Whale 2021 Research Plan for Laguna San Ignacio and Bahía Magdalena Baja California Sur, Mexico

On November 28, 2020 Alicia Schulman-Janiger reported on the first sightings of southward migrating gray whales passing through the Los Angeles area (see “Gray Whale Census @ PVIC” Facebook page). This highly anticipated winter southward migration follows the 2019 and 2020 Unusual Mortality Event (UME), during which at least 384 stranded dead gray whales were discovered along the Pacific coast of North America from Mexico to Alaska (<https://www.fisheries.noaa.gov/national/marine-life-distress/2019-2020-gray-whale-unusual-mortality-event-along-west-coast-and>).

Beginning in winter 2018, LSIESP researchers documented increasing numbers of “skinny” and “emaciated” gray whales in the winter breeding lagoons along the Baja California Sur’s Pacific Coast (<https://www.sanignaciograywhales.org/poor-body-condition-contributes-to-2019-gray-whale-ume/>). These observations preceded the UME and were an early indication that something was wrong with the health and condition of some gray whales that visited Laguna San Ignacio and Bahía Magdalena each winter. LSIESP researchers are eager to return to the lagoons in 2021 to gather new information on the numbers and condition of the gray whales. But the global COVID-19 virus pandemic has complicated planning for our gray whale field research in 2021.

The rapid rise in COVID-19 infection rates, hospitalizations, and fatalities in North America, especially in the United States, present health risks to our researchers and the local communities of Baja California Sur (<https://www.bing.com/covid/>). To slow the spread of the corona virus health officials closed the United States-Mexico border to all but essential travelers, preventing our collaborating researchers from outside of Mexico from entering the country. Unfortunately, COVID-19 infection rates are predicted to continue to increase as we enter the winter holiday season, a time when many people travel and gather to be with their families, and such gatherings are the situations when the virus spreads infecting others.

While we recognize the importance of documenting the status of gray whales during the post-UME winter of 2021, *our first priority* is to protect the health and wellbeing of our researchers, and not place them in situations where they may be exposed to the COVID-19 virus, or risk transmitting the virus to the local lagoon communities.

Fortunately, the COVID-19 infection rate in Baja California Sur, Mexico continues to be relatively low compared to larger more densely populated metropolitan areas. Because our collaborators cannot enter Mexico, we are planning to undertake a reduced field program with small research teams from the Universidad Autónoma de Baja California Sur (UABCS) in La Paz. These teams of 4 to 5 researchers will work in both Laguna San Ignacio and Bahía Magdalena, and focus on gathering basic information on gray whale abundance, calving rates, and photographic identification surveys to identify individual whales and to evaluate their body condition. We will also monitor gray whale mortality in the lagoons and gather basic information from stranded whales for comparison with the mortality rates during the UME of 2019-2020.

To protect the safety of our researchers, our senior staff in collaboration with representatives of the UABCS developed and will implement “safety protocols” for our researchers when they are traveling and working in the field at Laguna San Ignacio, and similar safety measures for field researchers at Bahía Magdalena. For example, we are requiring: testing for COVID-19 infection before, during, and following time spent in the field; and, isolating our work areas (i.e., our field laboratory and research vessel) from everyone except our researchers. At Laguna San Ignacio, Kuyima Eco-Turismo will provide housing, meals, bathing and restroom facilities at the Kuyimita Campground that are separate from those utilized by the public. Separate housing and facilities will also be available at Bahía Magdalena. We will ask that our teams maintain minimal contact with the local communities, and have no contact with eco-tourist visitors. Additional personal safety measures will include wearing masks when outside of “safe areas,” the frequent washing and sanitizing of hands, and maintaining of “social distancing” around others. We believe with these measures in place we will be able to safely undertake a limited gray whale field research program during the 2021 winter and obtain important information on the status of the whales following the recent UME.

Should COVID-19 infections within Baja California Sur increase in severity during the 2021 field season, we will suspend any remaining field activities, and return our researchers to the university and their homes in La Paz. The specific start and finish dates of our 2021 gray whale research field season will depend on the status of the COVID-19 pandemic in Baja California Sur, and local arrangements to safeguard the health of our researchers. We will announce our research schedule, along with other updates to our 2021 research plans, on our website at: (<https://www.sanignaciograywhales.org>).

For your own safety and that of your family, please follow your local health official’s advice, and stay safe, and stay well!



PERSONAL SAFETY MEASURES: COVID-19 most commonly spreads between people who are in close contact through respiratory droplets or small particles produced when an infected person coughs, talks, or breathes. Growing evidence shows that droplets can remain suspended in the air and travel distances beyond six feet, according to the CDC. Indoor environments with poor ventilation increase the risk of transmission.

To prevent infection and to slow transmission of COVID-19, do the following:

- Wash your hands regularly with soap and water, or clean them with alcohol-based hand rub.
- Cover your mouth and nose with a mask when in public settings or around others.
- Maintain at least six feet distance between you and people coughing or sneezing.
- Avoid touching your face.
- Cover your mouth and nose when coughing or sneezing.
- Stay home if you feel unwell.
- Refrain from smoking and other activities that weaken the lungs.
- Practice physical distancing by staying away from large groups of people.