

## **EXECUTIVE SUMMARY**

The tenth meeting of the Comité Internacional para la Recuperación de la Vaquita (CIRVA) was held at the Southwest Fisheries Science Center on December 11-12, 2017.

### **The dire status of the vaquita has worsened**

Thomas et al. (2017) estimated that, as of November 2016, only approximately 30 vaquitas likely remained. Analysis of the 2017 Acoustic Monitoring Program data showed that the decline has continued unabated. Thus, the already desperate situation has worsened, despite existing conservation measures and current enforcement efforts. Unless this decline can be stopped by eliminating mortality in illegal gillnets, the vaquita will be extinct in a few years. The critical work of the Acoustic Monitoring Program **must continue** in order to make possible the estimation of population trend and the evaluation of the efficacy of current and future conservation measures.

### **Placing vaquitas in a temporary sanctuary is no longer an option**

Given the dire situation, CIRVA previously recommended that attempts be made as a matter of urgency to place as many vaquitas as possible into a temporary sanctuary. CIRVA recognized that the risks of capture and captive maintenance were high, but concluded that these risks were outweighed by the very high likelihood of human-caused mortality in the wild that would lead to extinction in a short time. During the VaquitaCPR field effort from October 11 – November 10, 2017, two female vaquitas were captured, but both were released after showing signs of stress. The adult female died after release, and the fate of the smaller animal is unknown. CIRVA accepted the conclusion of experts in the VaquitaCPR team and the Independent Review Panel that further effort to rescue vaquitas by placing them under human care should be suspended. Despite this discouraging result, CIRVA **commends** SEMARNAT and its numerous partners who made this unprecedented rescue effort possible.

### **High levels of illegal fishing continue**

A multi-institutional program to find and remove illegal and abandoned fishing gear in the range of the vaquita has continued. In 166 days of field work through December 8, 2017, 518 pieces of illegal, abandoned, or derelict fishing gear were retrieved and 220 of these were active fishing gear. This shows that illegal fishing activities, particularly the setting of large-mesh gillnets for totoaba, continue at alarming levels within the range of the vaquita. CIRVA **recommends** that this important program should continue to remove fishing gear from the range of the vaquita with focus on the area of highest risk during totoaba spawning season.

### **Saving vaquitas from extinction relies on effective enforcement and continued net removal**

The combination of continued decline of the vaquita population and continued retrieval of hundreds of active gillnets constitutes strong evidence that without dramatic improvement in keeping gillnets out of the vaquita's habitat, Mexico will lose its largest endemic mammal. CIRVA **recommends** that, during the next totoaba season (December 2017 through May 2018), Mexico establish an enhanced enforcement program in the "exclusion zone" – the area believed to have the highest co-occurrence of vaquitas and illegal totoaba nets (see Figure below).

Within the exclusion zone, CIRVA **recommends** that the Government of Mexico:

- (1) prohibit all fishing and navigation;
- (2) increase enforcement presence to a level which is able to respond to any report of illegal activities within 30 minutes.
- (3) increase and focus net removal efforts are within in the exclusion zone.
- (4) negotiate the appropriate transit corridors to allow legal fishing to continue outside the exclusion zone.

It also **recommends** that drones be used to monitor the areas of historical totoaba fishing and vaquita entanglement near El Golfo de Santa Clara to prevent a geographical shift in illegal totoaba effort that

could kill vaquitas. Should evidence be brought to light of illegal fishing in this area, enforcement response will need to adapt swiftly.

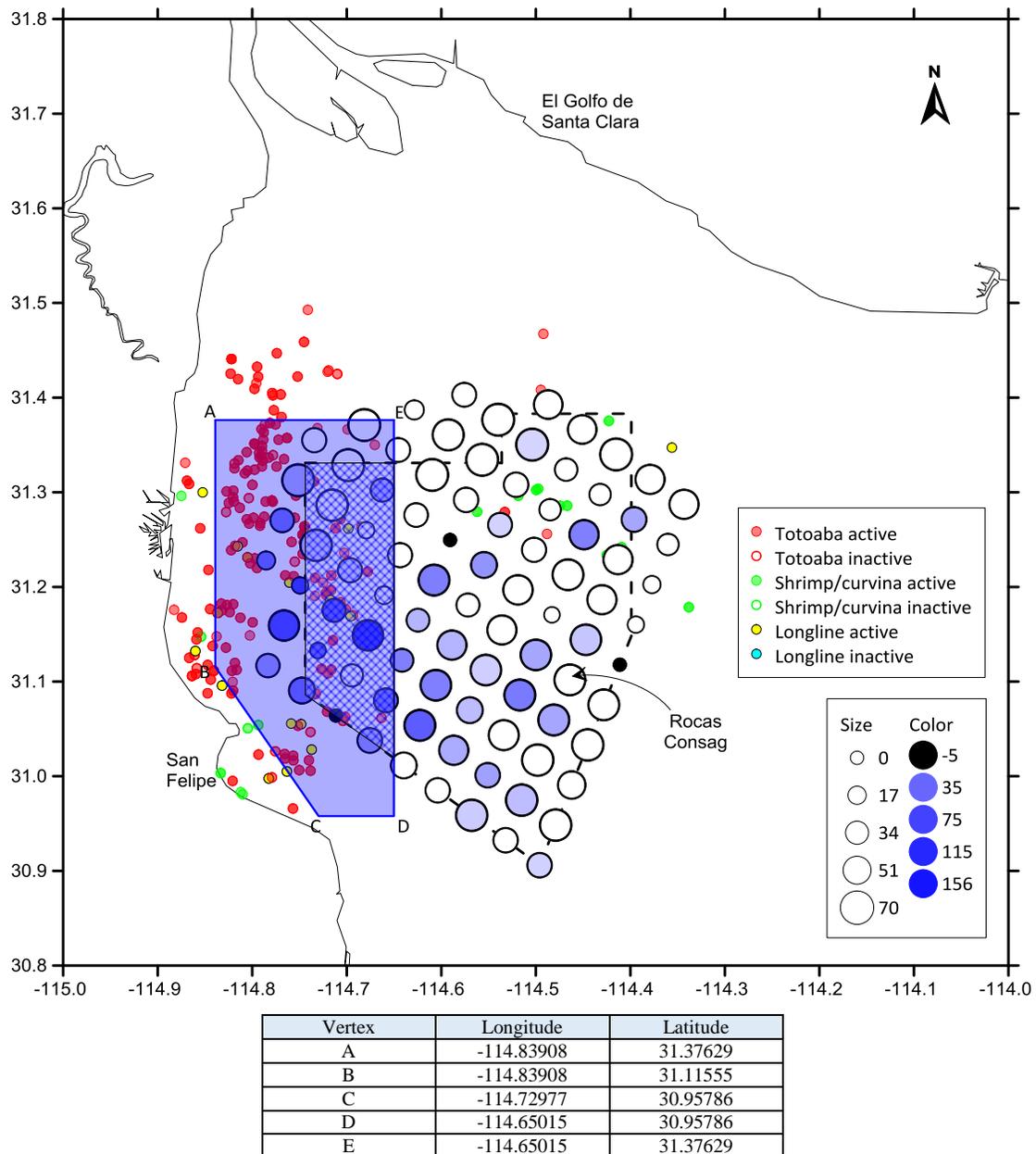


Fig. 4. The recommended Exclusion Zone (see Item 4) is shown as a blue polygon. The exact positions of the vertices (A-E) are shown in the small table above. The Vaquita Refuge agreed in 2005 is shown as a black broken line (the overlap with the Exclusion Zone is hatched). The small circles show the sites where fishing gear had been recovered (for types see legend in figure). The large circles show the raw results of acoustic monitoring between 4 June 26 and August 26<sup>th</sup>, 2017. The size of the circle indicates sampling effort (full days) whilst the color of the circle indicates the average acoustic detection rate (clicks/day) where black = no data, white = no detections and shade of blue represents click numbers (see legend in figure).

Immediate action is needed, and CIRVA **recommends** that:

- (1) All Mexican enforcement agencies increase their efforts on land and in water immediately and continue this enhanced enforcement program for the duration of the period of illegal totoaba fishing (at least until June 2018) to eliminate all setting of gillnets in the range of the vaquita.
- (2) Emergency regulations be promulgated immediately to strengthen the current gillnet ban and enhance enforcement and prosecution by:
  - a. eliminating all fishing permits for transient fishermen and limiting fishing access to only those fishermen who can demonstrate residency in the fishing villages;
  - b. confiscating any vessel that does not have the appropriate vessel identification, permits, and the required vessel monitoring system;
  - c. requiring vessel inspection for each fishing trip at the point of departure and landing;
  - d. prohibiting the sale or possession of gillnets on land and at sea within the area of the current gillnet ban and on adjacent lands within a specified distance of the coastline.
  - e. requiring that all gillnets be surrendered or confiscated and destroyed.
  - f. eliminating the exemptions for all gillnet fisheries, including the curvina and sierra fisheries.
- (3) Efforts to remove gillnets from vaquita habitat be continued and enhanced and the numbers and locations of new nets recovered be published monthly.
- (4) The number of inspections, interdictions, arrests, sentences, and other enforcement actions be published monthly, together with information on observed levels of illegal activities obtained from intelligence operations, for example from drones.
- (5) Successful prosecution and subsequent penalties be sufficient to deter illegal fishing.
- (6) Development of gillnet-free fisheries be enhanced and linkages to incentivize the conversion of the fleet to gillnet-free operations be strengthened.

The Tenth meeting of the Comité Internacional para la Recuperación de la Vaquita (CIRVA) was held at the Southwest Fisheries Science Center on December 11-12, 2017. CIRVA members in attendance included: Lorenzo Rojas-Bracho (chair), Armando Jaramillo-Legorreta, Barbara Taylor, Tim Gerrodette, Peter Thomas, Andrew Read, Robert Brownell, Greg Donovan, Frances Gulland, Nina Young, and Sarah Mesnick. CIRVA members Jay Barlow and Randall Reeves participated remotely. The committee's work was supported by a number of invited experts who provided presentations and contributed to plenary discussions. Rojas-Bracho chaired the meeting and Read, Thomas, Gerrodette, and Donovan acted as rapporteurs. Meeting participants are listed in Annex A. The agenda is given as Annex B.