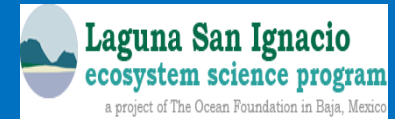
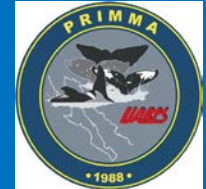
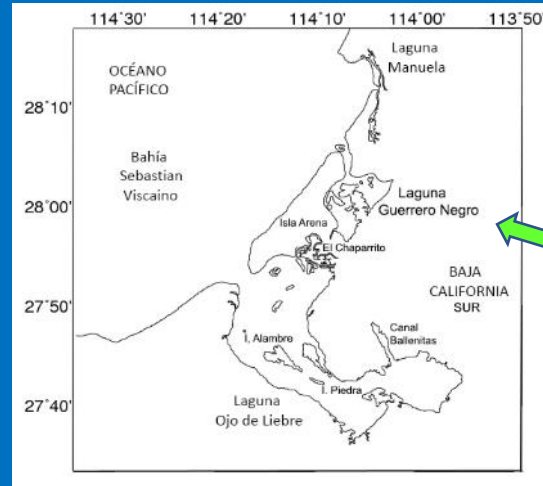


# Gray whale stranding events in México 2020

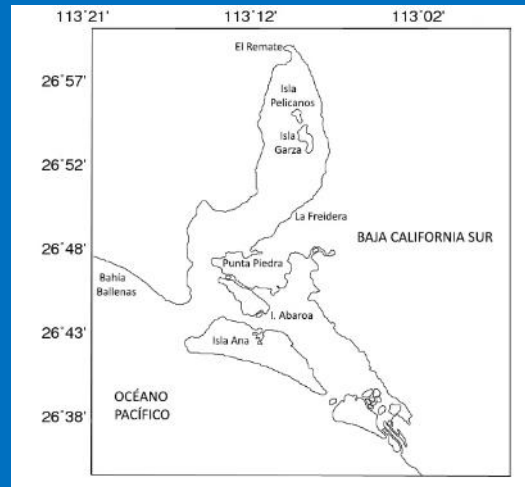


Sergio Martínez, Patricia Casanovas, Lorena Vilorio, Steven Swartz, Jorge Urbán

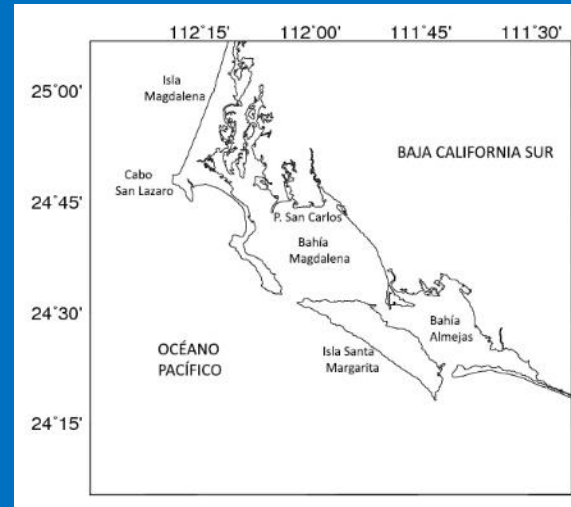
# Breeding areas in México



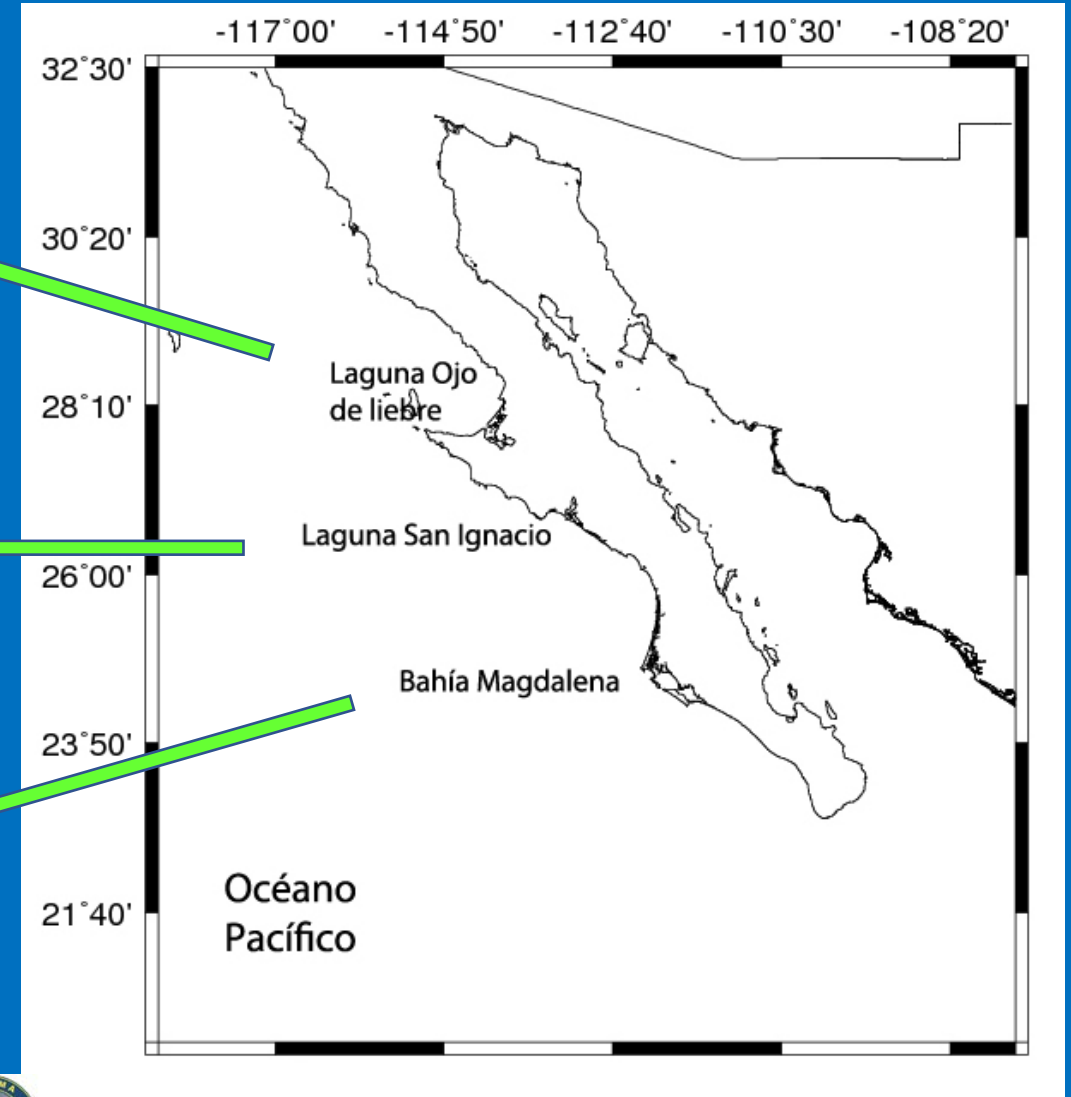
LOL



LSI

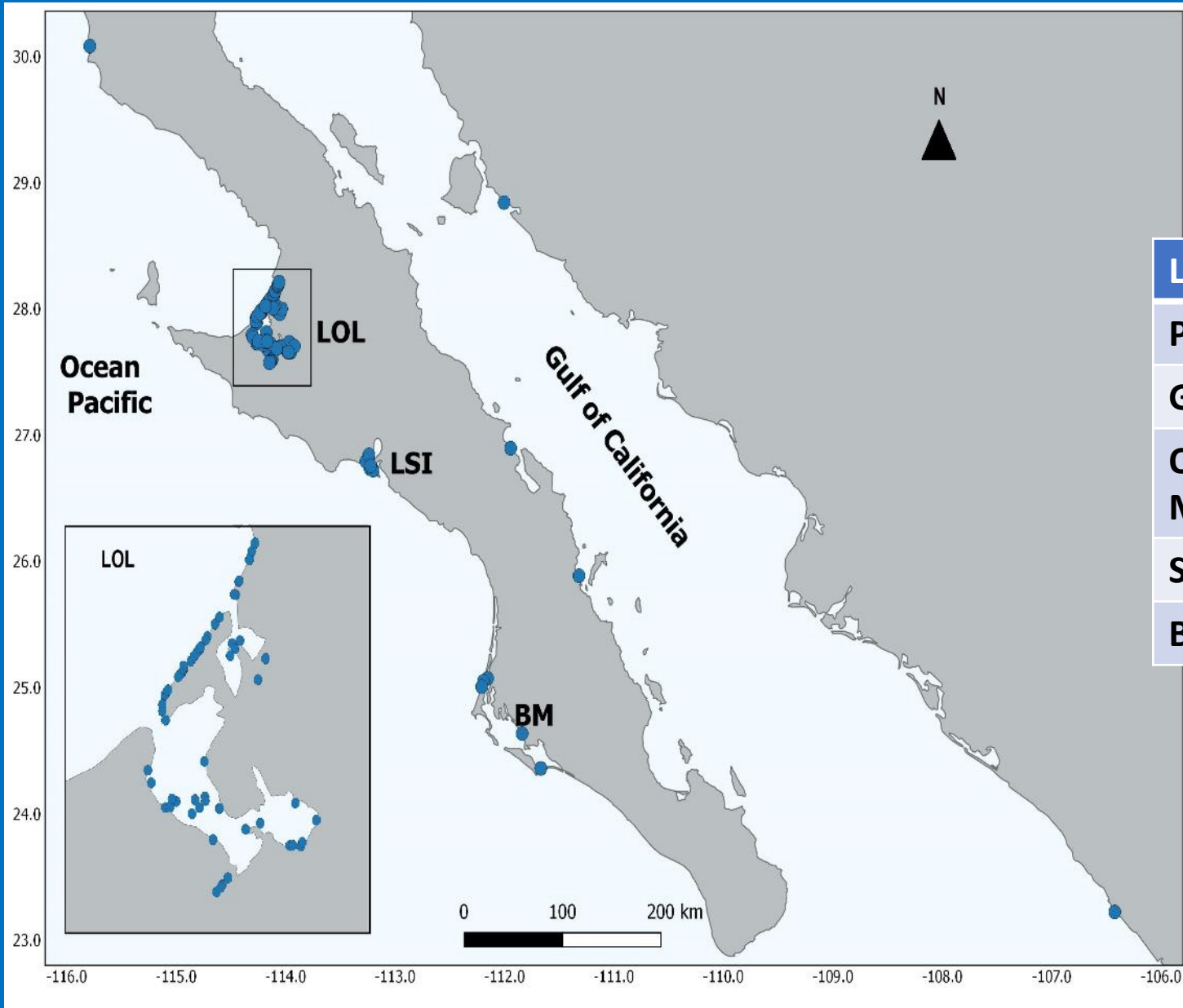


BM



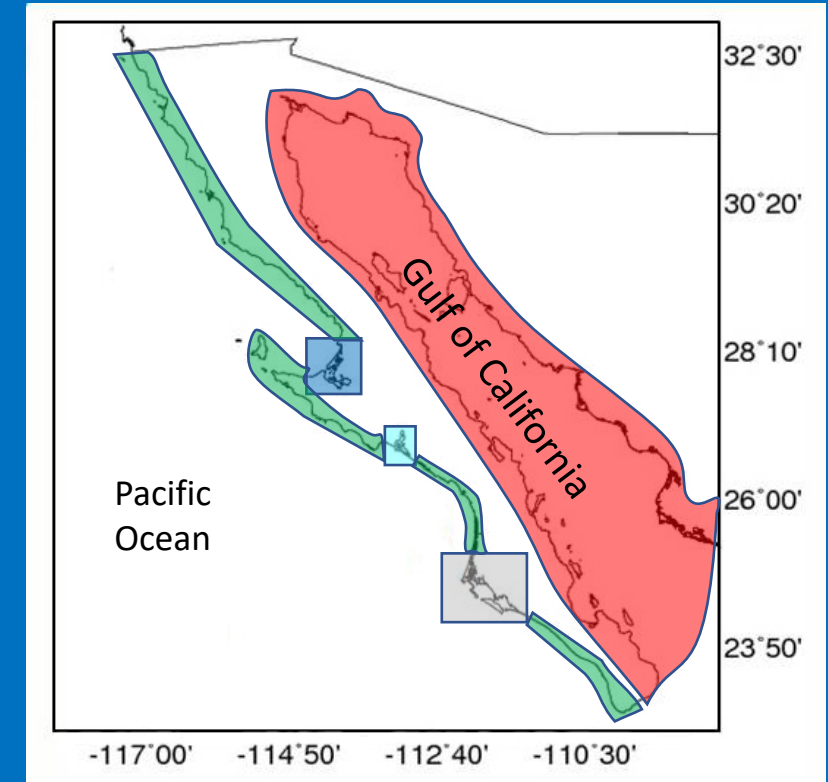
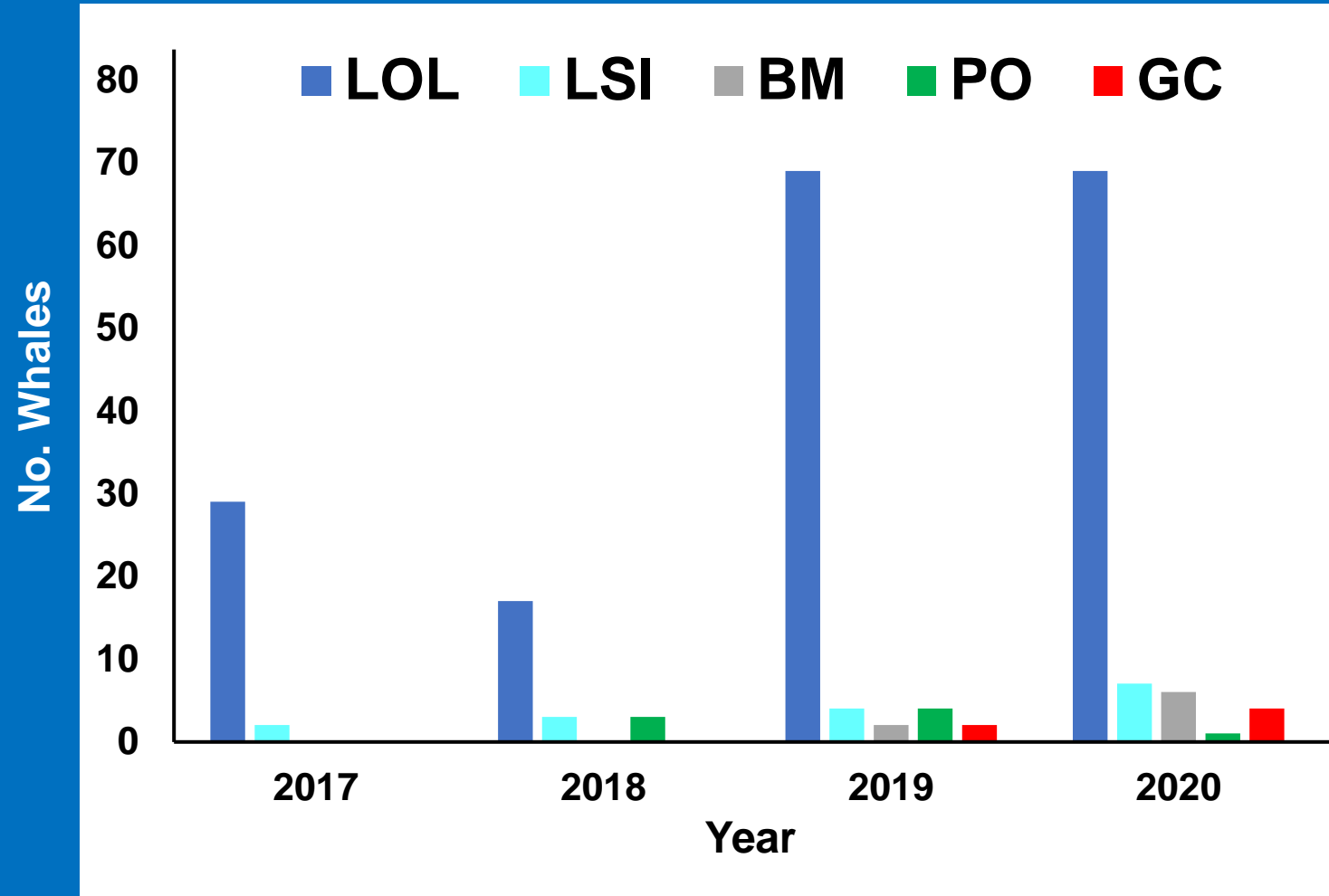
# Gray whales stranded in Mexico (2020)

26 Dec 2019 – 12 April 2020

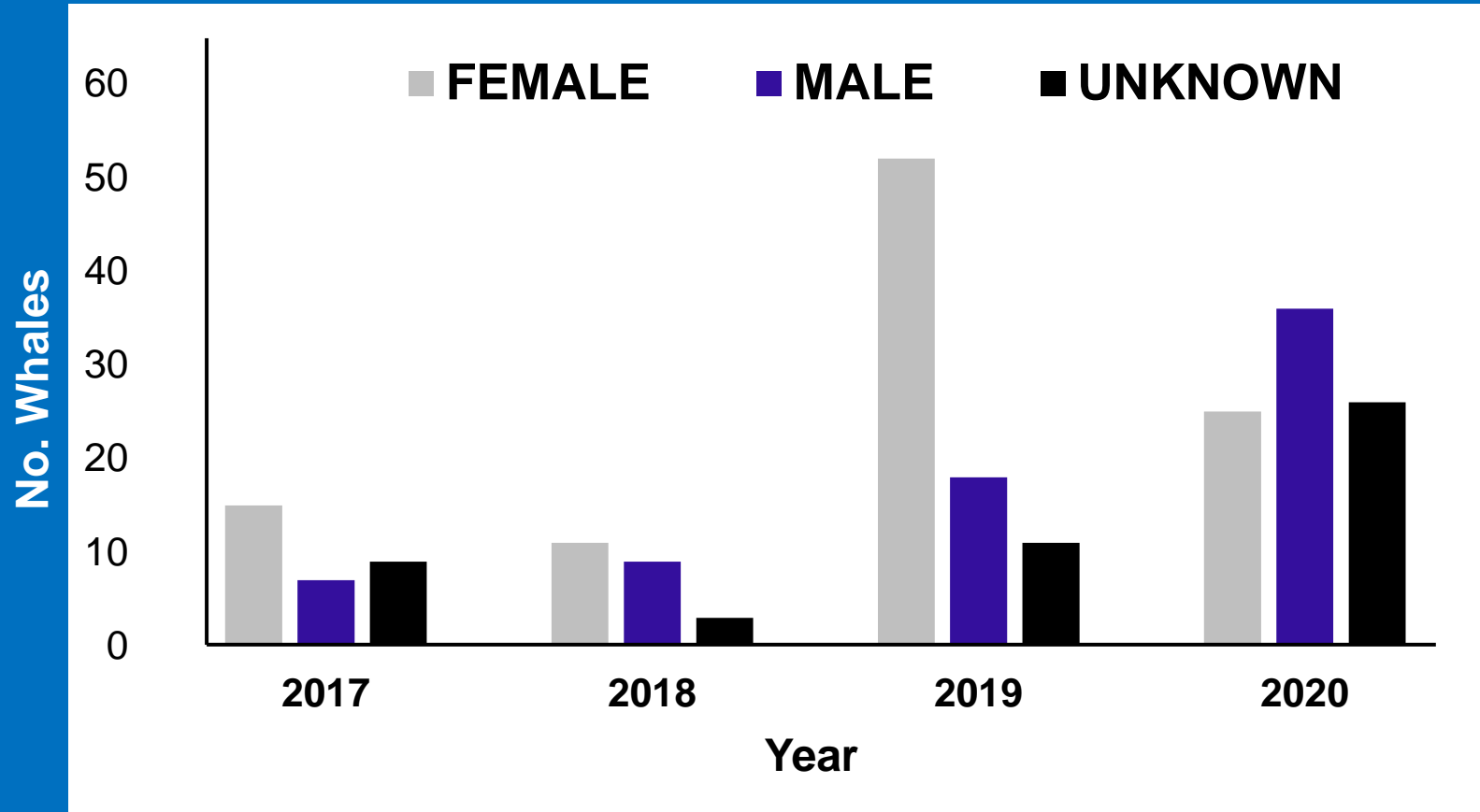


Locality	No. whales
Pacific Coast Baja California Pen	1
Gulf of California	4
Ojo de Liebre / Guerrero Negro / Manuela Lagoons	69
San Ignacio Lagoon	7
Bahia Magdalena Complex	6

# Gray whales stranded in Mexico (2017-2020) by zone

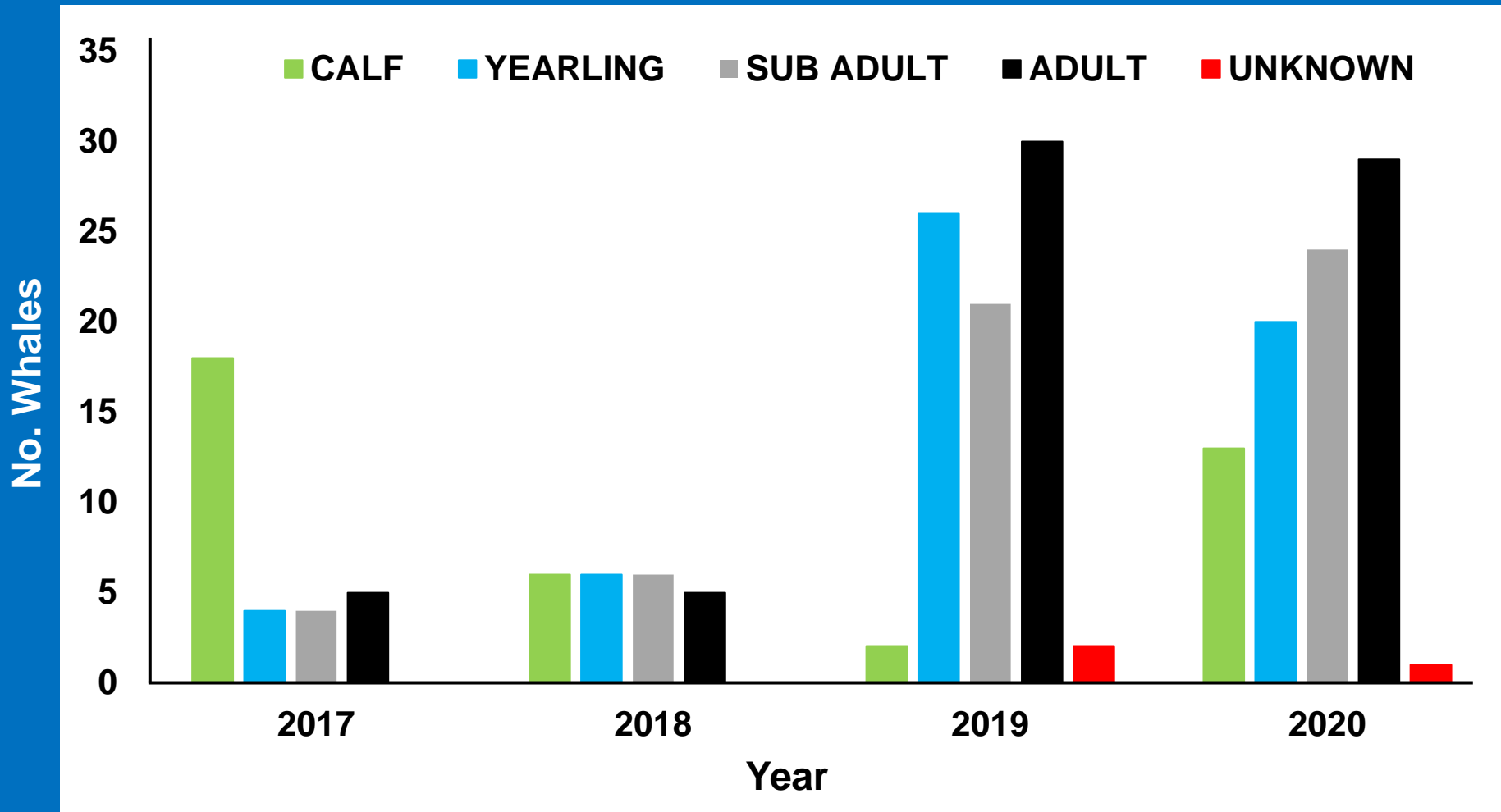


# Gray whales stranded in Mexico (2017-2020) by sex



Female	Male	Unknown
25	36	26

# Gray whales stranded in Mexico (2017-2020) by age category

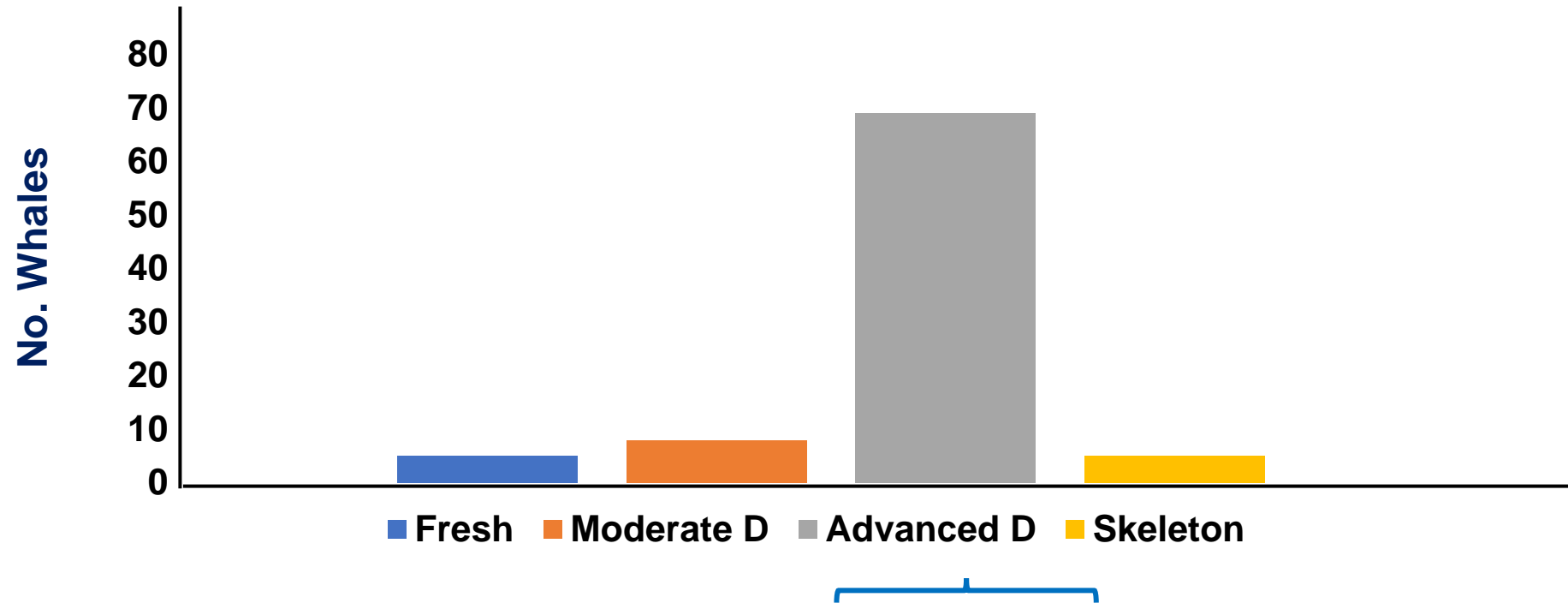


**2020**

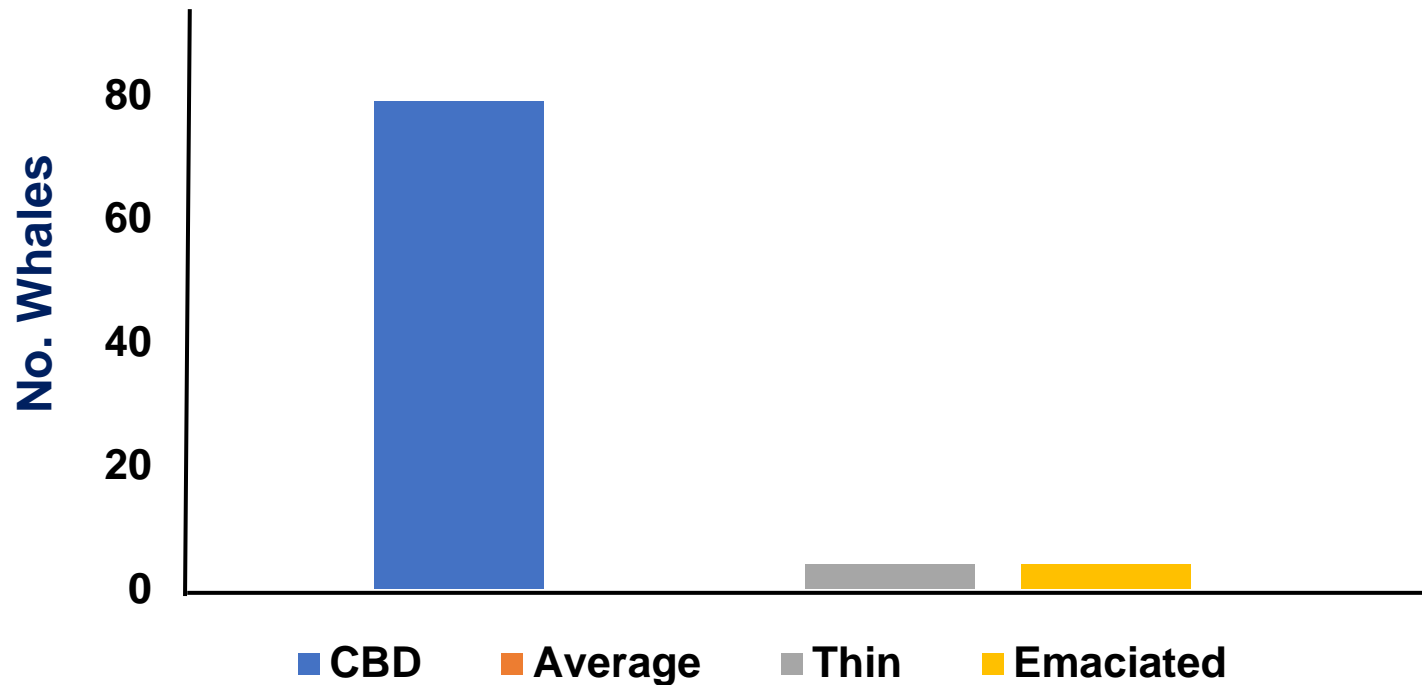
Age Category	No. whales
Calf	13
Yearling	20
Juvenile/ Subadult	24
Adult	29
Unknown	1



# Gray whales carcass condition



# Body condition in Gray whales stranded in Mexico (2020)



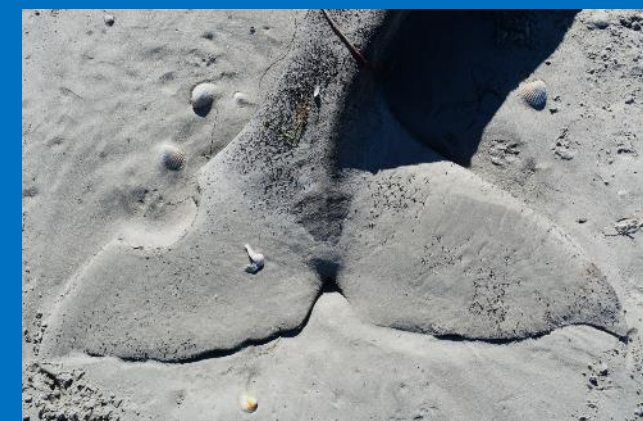
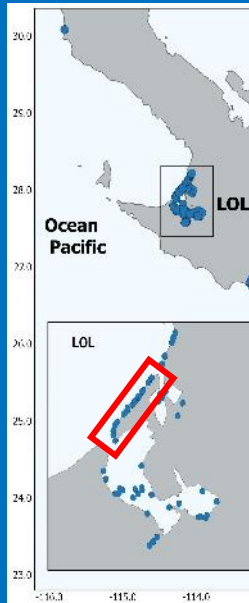
Same whale



32 from 87 events were in Isla Arenas,  
Ojo de Liebre lagoon

30 were in Advanced Decomposition

Many of them with shark bites



# Necropsy



**Stranding LOL 007**

**6-Feb-2020**

**Isla Arena, Ojo de  
Liebre Lagoon**

**28.03353 Lat/ -  
114.17551 Long**

**Code 2**

**Calf**

**Male**

**510 cm**

**Thin**

**Hi**

# Necropsy 1



Degloving wound on caudal third of carcass. Most likely post-mortem



**Initial differential diagnosis of cause of death:**

Starvation to death due to:

- Mother-calf pair separation
- Low in nutrients lactation
- Boat-strike





Blubber layer: 5,7cm blubber, erythemic in deep layer, absent subcutaneous fat



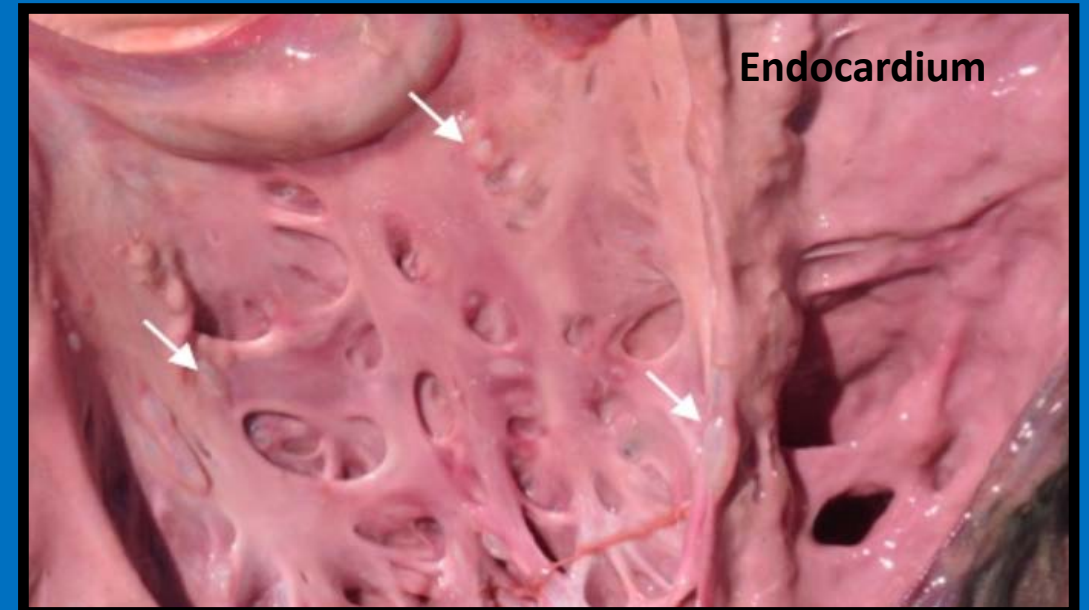
Veterinarian: Patricia Casanovas Gamba



Dorsoventral view of cardiac  
figure - absence of pericardial fat



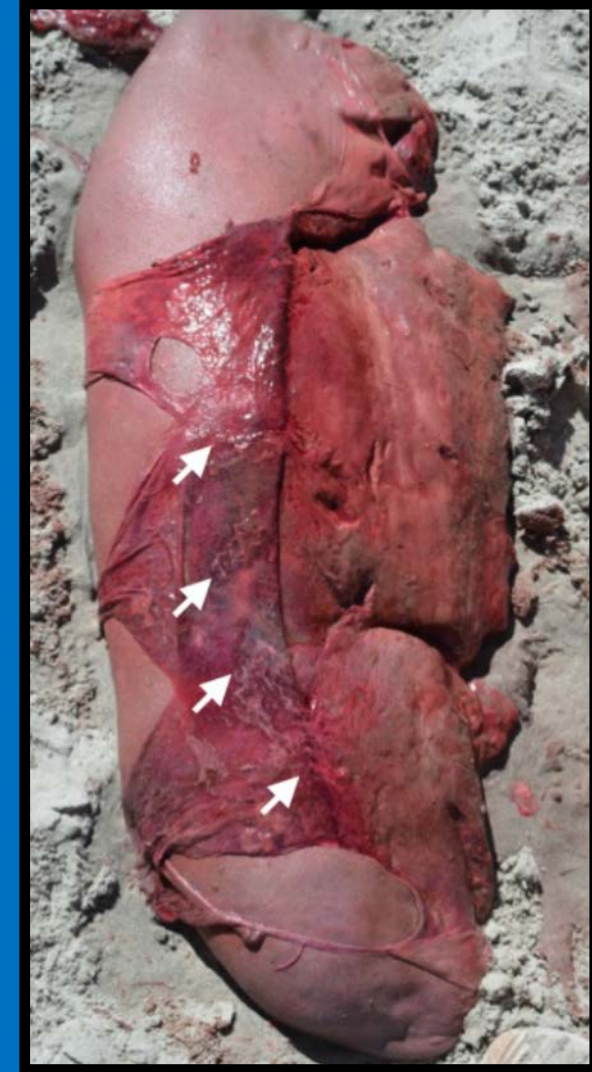
Right - autolysis  
White arrows - cystic formations in  
trabeculae muscles



Fibrinous type pleuritis signs - diffuse adhesions between visceral pleura and pulmonary parenchyma

*Heart anatomy alterations and pulmonary adhesions are considered most probably congenital the former and secondary the latter.*

Most probable cause of death is starvation due to either mother-calf pair separation or low in nutrients lactation.



Lung



## Stranding LOL 013

13-Feb-2020

Camino al Faro  
laguna Guerrero  
Negro

28.02909 Lat/ -  
114.11533 Long

Code 3

Juvenile / Subadult

Male

900 cm

Body Condition CBD

No Hi or Fi

Scavenging



## Necropsy 2



**Initial differential diagnosis  
of cause of death:**

- Starvation
- Systemic chronic processes (contaminants, infection)

Veterinarian: Patricia Casanovas Gamba



Max. Width of blubber layer 6.4cm, side 6.6 and thoracic 5.2, absence of subcutaneous fat



View of mesenterium: Serous atrophy of fat, absence of fat deposits.



Stomach 1/main: Friable, very autolyzed, black dough content possible autolyzed mucosa.



Stomach 2/fore: Empty other than 1 shrimp, no signs of pathology nor atolysis.





Stomach 3/pyloric: empty other than black small stones and black oily clumps “like asphalt”



Small intestine cut: Absence of bolus/faeces.

Other characteristics:  
no alterations found on kidneys  
macroscopically, no enlarged lymph  
nodes found.



Most probable  
cause of death  
is anorexia and  
starvation



# Other necropsy attempts

LSI 004



LSI 005



## Samples collected

Sample	No.
baleen	24 (8 plates each one)
skin	10
blubber	7
Stomach	1
lung	1





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