















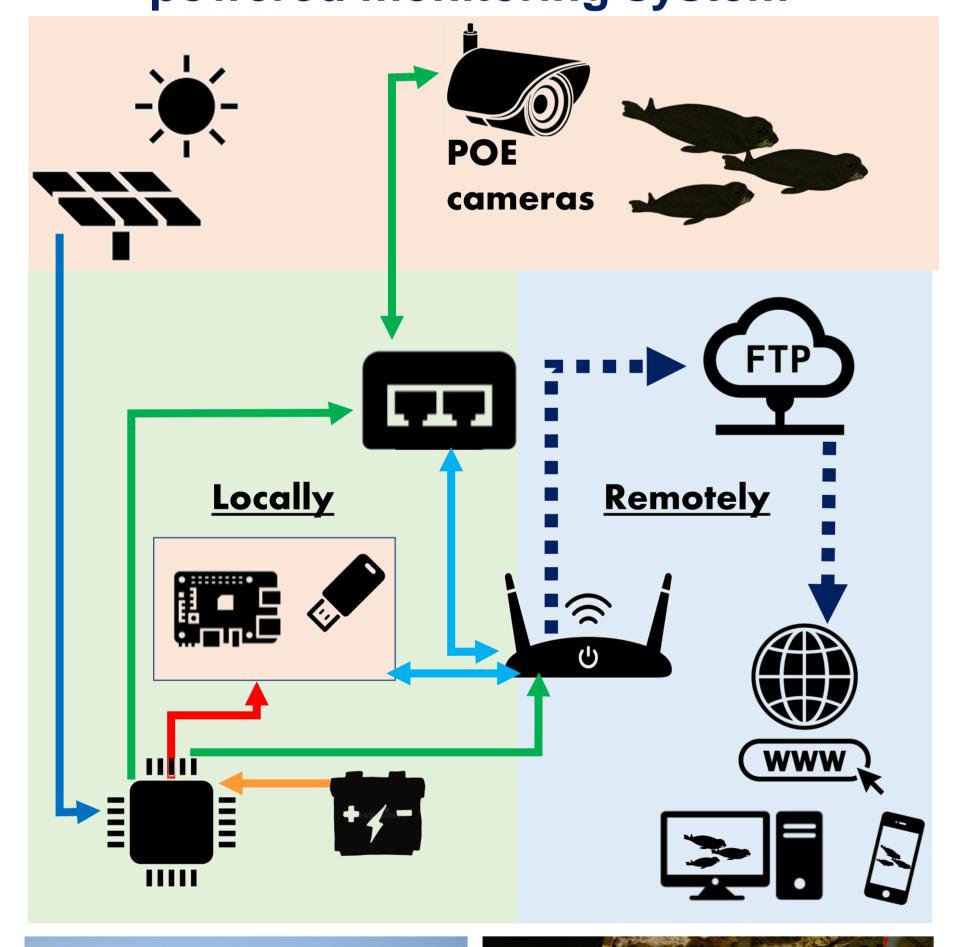
Occurrence and Haul-out Pattern of a Mediterranean Monk Seal Colony Inhabiting the Inner Ionian Sea Archipelago, Greece.

Manel Gazo¹, André Guinand², Julien Pfyffer², Carmen Andrés³ and Joan Gonzalvo³ ¹ Institute of Biodiversity Research (IRBio), University of Barcelona | ² Octopus Foundation, Switzerland | ³ Tethys Research Institute, Italy

- Mediterranean monk seal (*Monachus monachus*) distribution within the Mediterranean Sea is changing.
- Favorable improved conditions, reduction on intentional killings, access to key habitat and prey may benefit the species, leading to its re-establishment through stragglers arriving from better-established adjacent populations.
- Between May 2019 and October 2022 we monitored the monk seal colony occurring in Formicula, an islet within the Inner Ionian Sea Archipelago (Nat 2000 site GR2220003), Greece.
- A total of 1,040 days of effective monitoring were conducted resulting in 99,840 images.

HOW?

Continuously recording solar powered monitoring system



 Autonomous Monitoring Service connected to local phone network via a 3G/4G router.

 Time lapse interval of 1 frame taken every 15 min sent to a secured FTP server in the cloud.

Proved to be a valuable methodology to conduct this species monitoring

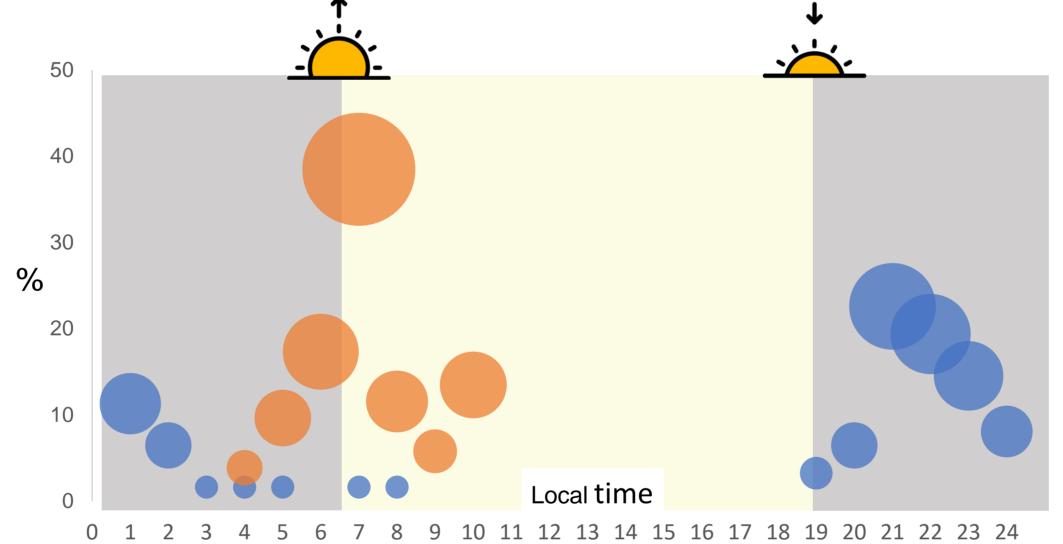
41,4% 77,2% 2019

2020 2022 **SPRING WINTER**

→ Presence of monk seal inside monitored caves - percentage of days YEAR (left) SEASON (right)

46,8%

The species has been using Formicula during all seasons since the last 5 years



→ Seals entering the caves and returning to the water



sunset to midnight Range 20:00h - 01:00h Return to the water at sunrise (mostly 06:00h-07:00h)



Range 2h 30min - 15h 15min. Lactating females remain hauled out

WHO?

65,3%

SUMMER

67,7%

AUTUMN



Haul out aggregations up to 11 individuals. No age or sex segregation



At least two pupping episodes during the monitored period



Adult males observed hauled out and resting together

Monk seals in Inner Ionian Sea

FOR

THOUGHT

- > Formicula haul-out sites provide key habitat for the species.
- → Continuous occurrence, large aggregations and breeding episodes.
- -> Relevant implications for the design of adequate management and conservation measures in the local Natura 2000 site.









