



# "The Secret Life of Lontra felina": Nocturnal records and use of an artificial breakwater by the marine otter at Playa Valdivia in the district





## of Asia, Lima-Peru.

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#### **INTRODUCTION**

The marine otter, or "chungungo" (Lontra felina), is a coastal predator belonging to the Mustelidae family.

This species is commonly described as diurnal and has the ability anthropogenic infrastructures.



Figure 1. Lontra felina (Photo: Mara Llontop)

#### **RESEARCH PROBLEM**

There are studies with limitations as activity can only be recorded during the day (Badilla & Nascimento, 2009). The preferred areas of otters are usually rocky zones, which pose risks for researchers due to their difficult access. The elusive nature of the species also complicates data collection during nighttime hours. These difficulties limit the understanding of their ecology and adaptive behavior.

## **OBJETIVES**

#### **General Objective:**

Document the nocturnal behavior of the marine otter and its various uses of an artificial breakwater to contribute to the understanding of its spatial and temporal ecology.

#### **Specific Objectives:**

- Document the **nocturnal activity** of Lontra felina using camera traps.
- Identify biological traces such as feces and food remains to understand how the species utilizes the artificial breakwater.
- Analyze the activity periods of the otter at the breakwater, distinguishing between dawn, day, dusk, and night.

#### MATERIALS AND METHODS

In the present study, a camera trap was used along with periodic inspections from October 1st to December 30th during battery changes in the district of Asia, Lima-Perú, during which biological traces such as feces, food remains, or anal secretions were searched for.











### **Procedure**

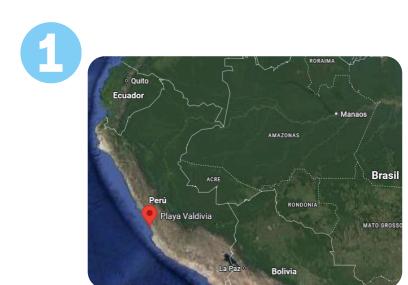


Figure 2. Google Maps: Playa Valdivia





Figure 3. Artificial breakwater

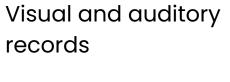


Figure 4. Camera trap installation











Potential records



Excluded records



of the day (Rheingantz, M., 2016).



**Dawn**: 5:00 a 6:00



**Dusk**: 18:00 a 19:00



The **observations** were classified into four periods

**Night**: 19:00 a 5:00

**Day**: 6:00 a 18:00

#### **RESULTS**

With an effort of 13 trap nights, a total of 106 events were recorded: 42 visual and auditory records of the otter, and 29 potential records.

40.48% of the records were diurnal, 33.3% nocturnal, 14.29% during dawn, and 11.9% during dusk. A significant number of biological traces were found.

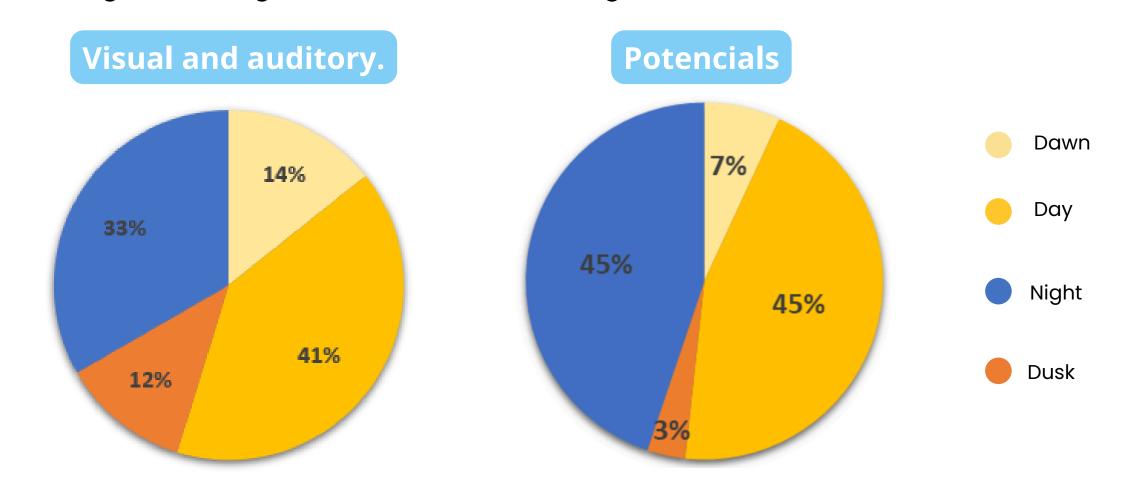


Gráfico 1. Percentages of visual, auditory, and potential observation records.

# **Diurnal records**



Figure 5. 17 diurnal events were recorded with the camera trap.

# **Nocturnal records**



Figure 6. 14 nocturnal events were recorded with the camera trap.



Figure 8. 21 marine otter feces Figure 7. Anal mucous, an indicator of were recorded. territoriality.



Figure 9. Approximately **50** purple crab remains.

#### **DISCUSSION AND CONCLUSION**

- These results highlight the importance of continuing to investigate the circadian activity patterns of Lontra felina, as there is only a **minimal** difference between the numbers of diurnal and nocturnal events (Medina-Vogel et al., 2007).
- Furthermore, the traces found indicate a differentiated use of the breakwater, suggesting that its different areas serve specific functions, possibly related to feeding and territorial marking activities.

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Some records and our contact in the qr!

