



Orca Inquiry Researcher Profile

Name

Manuel Morgan (he/him)

Job Title

Hydrophone Specialist

Years of Experience

7 years

Greatest Scientific Accomplishment

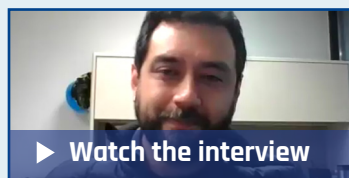
Developing a new, non-destructive technique to test the quality of metal structures. This work is patented.

Hobbies

Building small electronic projects and playing guitar

Super Power

Visualizing ideas, creativity



Glossary

Deploy: Put into position

Install: Place in position ready for use

IN PARTNERSHIP WITH:



My role at Ocean Networks Canada

As a hydrophone specialist, I am responsible for ensuring that the data collected by the scientific instruments is accurate. I am a member of the testing and development team of engineers and technicians, and I work collaboratively to solve problems about how to **deploy** and **install** hydrophones. As an example, hydrophones pick up sound vibrations, and the frame that holds the hydrophone can create background sounds that diminish the quality of the sounds we want to pick up. I work to develop better ways to use the instruments and to collect sounds from the ocean, whether that's marine mammals or vessels or hydrothermal vents.

My typical day goes like this

- Check emails
- Go to the lab and develop new ways to test, troubleshoot and solve the current problem
- Enjoying the commute back and forth from Victoria to the Marine Technology Centre in North Saanich

Other tasks

- Collaborate with the Ocean Networks Canada science team

Inquiry Connection

In your opinion, what needs to be considered when creating a plan to manage orca habitat?

There are three key aspects: lack of prey, presence of contaminants and the noise disturbance of vessel traffic. My main work is with the noise aspect of this. Stopping all marine traffic would be useful but not realistic. We need to accurately quantify the sound levels of marine traffic so that we can develop policies to reduce. Transport at different times or speeds may help reduce noise interference. Studies to know where the orcas are paired with an understanding of the noise levels will help us make the best decisions.

How do you think we should manage orca habitat?