

Malpelo: documenting a unique ecosystem

In 2002, Andrés Pineda, a filmmaker who lives in Bogotá, Colombia, went on a diving trip to the remote oceanic island and marine sanctuary of Malpelo. He was struck by the landscape and the variety of wildlife on and around the rocky outpost.

Pineda decided that the island's ecosystem was a fascinating subject for a documentary film. He applied for and received a grant from the Colombia Ministry of Culture. He went on to produce, direct and photograph the film using 16mm and Super 16mm film cameras.

"Malpelo is a mysterious place, like another world," Pineda says. "I approached the film with an open mind, ready to adapt to any opportunities that arose. The theme is the interconnection and balance among species in a food chain."

Malpelo rises 1,190 feet above sea level. That provided Pineda

For surface work, Pineda generally used a different, spring-wound Bolex with C-mount lenses ranging from 10 to 135mm. The tiny 16mm camera was lightweight and didn't require batteries, which was a good choice given the steep landscape. Pineda exposed the film in natural light during the entire three-day shoot. He used Eastman EXR 50D 7245 and Kodak VISION2 200T 7217 films. Pineda overexposed all three stocks by half a stop to record a denser negative. He says that the three emulsions blended perfectly during post-production.

After the negative was processed, it was transferred to D-5 4:2:2 digital video format with a Spirit DataCine and 2K color correction at Matchframe in Burbank, California. During the digital intermediate stage, Pineda added some movement within frames on time lapse shots to render the impression of a moving camera, and smoothed out some bumpiness in shots taken from a moving boat.

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with a dramatic perspective and access to huge colonies of sea birds, including the masked booby, which he filmed flying in poetic slow motion. Local varieties of crabs and lizards, shot with macro and telephoto lenses respectively, also appear in the film. The main characters are hammerhead sharks, sometimes referred to as the guardian of the health of marine ecosystems.

The underwater cinematography offered numerous challenges. Turbidity complicated Pineda's camera work, but clear water didn't attract wildlife. Underwater, Pineda used a 10mm lens mounted on a Super 16 Bolex camera. He worked at depths from 10 to 100 feet, changing the T-stop from 1.9 to 11 depending upon the underwater light. He notes that colors change underwater to a monochromatic blue depending on depth and distance to the subject.

"For the underwater footage, I used (Kodak VISION2 500T) 7218 film," says Pineda. "I had an 85 filter and a magenta color correction filter on the lens that partly compensated for the color shift, and I used a partial color correction filter to adjust further at greater depths and distances. This allowed me the latitude to correct colors back to normal in post-production. I found that a heavier magenta underwater color correction filter turned everything too dark in deep waters. Even with the filters I used, I could barely see through the viewfinder, so I left the rest of the color correction for post-production."

"I tried to maintain a good T-stop, and the fast 7218 film helped me get good depth of field," he says. "The sharks appear and disappear so quickly, and I couldn't take the risk of missing them. The stock sees everywhere, showing lots of detail in the murky water that they like. We added more contrast and boosted color during post-production, which also helped."

The images were then recorded out to Kodak Vision color intermediate film 5242 with a Lasergraphic filmrecorder at Ascent Media in Burbank.

"I think shooting 16mm film and recording out to 35mm using a digital master is a great approach," says Pineda. "It provides excellent quality images, and you have a very wide range of possibilities available for manipulating the pictures in digital intermediate. I feel I was very lucky to get the images of wildlife that I got. I'm very pleased with how the film turned out." ■

Above: Filmmaker Andrés Pineda on location while filming a scene for the documentary on Malpelo's ecosystem.

Below: A masked booby from the film.

