

National Oceanic and Atmospheric Administration

Many Arctic species are at risk due to climate change and habitat degradation. But monitoring these animals and assessing their well-being is challenging. Now, the National Oceanic and Atmospheric Administration (NOAA) has teamed up with Microsoft on an initiative that uses Microsoft AI to find and monitor vulnerable marine species.



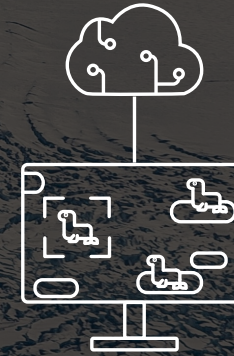
1. Scientists take twin engine plane flights over sea ice.



2. They collect high resolution multispectral imagery of the sea ice to determine seal population counts.



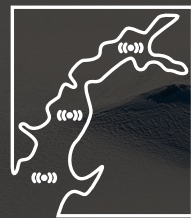
3. Terabytes of high resolutions imagery are processed at NOAA and AI models separate seals from ice formations to determine seal population counts.



NOAA scientists want to monitor hard-to-study marine mammals like Beluga whales and Arctic seals to better understand their behavior and protect them.



1. Scientists place sound sensors in locations such as Cook Inlet.



2. Sensors record beluga whale's vocalizations.



3. Terabytes of sound recordings are processed at NOAA and Microsoft AI models separate whale calls from background noise such as motorboats.



NOAA uses this information to make more informed decisions about when and where these vital marine mammal species need protection.