

## Guess the Telemetry Type!

How do scientists learn where wild animals go? Two different tracking methods they use are “radio telemetry” and “satellite telemetry.” For example, the National Park Service (NPS) is investigating coastal black bear movements in the Kenai Fjords National Park. The number of visitors camping in Kenai Fjords National Park has been increasing in recent years. NPS researchers are comparing bear activities in areas where lots of people camp with those in areas where very few people camp. Black bears are found in areas where lots of trees and bushes grow, which makes it tough for researchers to follow the bears. To help make the researchers job easier they attach radio collars with Global Positioning System (GPS) locators around the bears neck. These collars allow researchers to monitor the bears through their natural habitat and see if they’re avoiding the campgrounds.

Alaska SeaLife Center (ASLC) researchers are currently tagging seals that have been rehabilitated. Seals live in the marine environment and spend small amounts of time hauled out on ice flows, rocks or beaches. Since these seals live in the ocean it makes it difficult for researchers to follow them. The seals are “tagged” with satellite tags that help researchers see if the animals do well after rehabilitation.

What are the differences and similarities between radio and satellite telemetry? Place the letter R = radio telemetry, S = satellite telemetry, B = both, in the space provided.

- \_\_\_signal can only be transmitted over a couple of miles
- \_\_\_records animal’s location only
- \_\_\_transmits data to equipment orbiting the earth
- \_\_\_can be attached to the animal with epoxy
- \_\_\_may cost up to \$5000.00
- \_\_\_researcher must be out in the field / air with a receiver to collect the data
- \_\_\_will not transmit from under water
- \_\_\_signal can be transmitted to a computer at any location
- \_\_\_emits a VHF signal in a series of “beeps”
- \_\_\_\$200.00 - \$300.00 per tag
- \_\_\_falls off of the animal when it molts
- \_\_\_some record swim parameters (swim speed, dive duration, and depth) in

addition to the animal's location

\_\_\_run on battery power