

Radio Telemetry

Radio Telemetry is used to study animals in vast open forests. It provides detailed long-term information about the activities of specific animals. Radio collars are the most practical way to study tigers in vast areas like the Russian Far East where a single tiger's territory may be 400 square miles



PUTTING A COLLAR ON A TIGER:

- The tiger is caught using a soft grip snare.
 - The tiger is temporarily immobilized using a dart gun with immobilizing drugs.
 - A radio collar that emits a unique radio frequency is fastened around the tiger's neck.
 - Blood and hair samples are obtained for genetic analysis, and a physical examination is performed.
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- After a short time, the tiger recovers from the drug and leaves with the collar around its neck.
 - Using a handheld antennae or one mounted on an airplane, researchers can pinpoint the tiger's location.
 - Tracking on the ground is limited to several miles because the radio signal only travels through unobstructed air.
 - Tracking from an airplane allows more tigers to be located in a shorter time.



- The tiger's movements are plotted on a map, and from this information its home range boundaries and favored areas are determined.
- The same method helps researchers locate tiger kills allowing them to assess what the tiger is eating and how often.
- After several years, when the battery in the collar starts to die, researchers must recapture the tiger and replace the collar.

Since 1995, the Siberian Tiger Project has collared and monitored 32 wild Amur tigers in the Russian Far East. In 2002 they are monitoring 5 adult females and 1 adult male.

Photographs are courtesy of Howard Quigley: Hornocker Wildlife Institute-Wildlife Conservation Society.