

North American Bear Center

Newsletter

Vol. 3 No. 2 Spring, 1999

Address correspondence concerning newsletters to: Rose Thielbar, 14151 Ojibway Shores, Ely, MN55731 Membership Information to: Judy Rich, 3877 Swanson Shores Rd., Ely, MN 55731 - Visit our web site at www.bear.org



SPRING AND THE MATING SEASON

by Lynn Rogers

One of my research methods is gaining the trust of individual bears to the extent that they ignore me as I walk directly behind them, and late May to early July is the most exciting time for this kind of research. This is mating season and perhaps the bear's most active time of year.

As mating season approaches, hormonal changes take place in the females. Mothers who spent the previous seventeen months warming, feeding and protecting their cubs, abruptly become aggressive toward them and force them away.

Free of their yearlings, mothers begin laying down scent trails to intercept males that are roaming areas that average about 30 square miles at that time of year. The area covered by each male includes the territories of seven to fifteen females. I watched from an airplane as a radio-collared female roamed nearly two miles outside her territory, laying down a scent trail in her neighbor's territory. She didn't stop to eat; she just kept walking in a big loop back to her territory. It took less than an hour and 45 minutes for a male to cross her scent trail. When I saw him, he was that far behind her, hurrying along with nose to the ground on the exact path she had taken. She was nearly back to her territory and was a mile and three quarters ahead of him. She stopped shortly after entering her territory and the male caught up to her.

Females become attractive to males several days before they become receptive. During those days, larger males chase smaller ones away, or the males fight it out if they are evenly matched.

Theoretically, the strongest male is the one still left when the female becomes receptive, but there are many variations. Some females have multiple partners. I watched a receptive radio-collared female from an airplane as she fed in a clear-cut and two males followed her trail. The first male took every twist and turn that the female had taken 59 minutes earlier as she foraged along. He moved quickly, covering 300 yards in about 5 minutes. When he appeared behind her, she ran a short way, stopped, loped away again, and then slowed to a walk as he caught up and mounted her. As they copulated, a larger male was making his way more cautiously along the exact twisting route that the others followed. He came more slowly, probably because he could smell the fresh scent of the other male. At that point the pilot told me we were almost out of fuel and had to leave.



We landed five miles away on Mitawan Lake at my research base near Isabella, Minnesota. One of my assistants happened to be there with a vehicle, so we headed out to learn the rest of the story. An old logging road led nearly to where I had seen the bears. From there, we followed the female's radio signal until we could hear the male's uh-uh-uh-uh-uh as he thrusted. We sneaked closer and saw that it was the second male

before they broke and ran. The first male, which was radio-collared, evidently had been forced to leave, but his signal showed that he was still waiting a safe two hundred yards from the couple.

On May 29, 1990, I was walking with a female on the day she became receptive. A magnificent male had been following her for a couple days. He had the broad head of a fully-grown bear and was of a size I hadn't often seen. He probably knew she was about to become receptive, and it must have been frustrating that I was with her. This is a shortcoming of an observation method that reveals so much about habitat use, communication methods, and mother/cub relationships.

He shadowed us from a distance until she lay down for naps. Then he tiptoed closer and each time ran crashing away when he discovered me lying there yet. This went on until it was so dark that I couldn't tell a shadow from a bear. Suddenly, as we moved along the trail, there was a big breathing shadow within five feet of me. He went directly between me and the female and began following close behind her, faster than I could keep up in the dark. As they disappeared ahead, I heard him making the hiccuping sound males make when they want to mate. I got out my flashlight and telemetry receiver and homed in on her signal.

When I came upon them about 10 minutes later, they were copulating, and they continued with me standing ten feet away in a small forest opening with them. He had his arms under her hindquarters lifting her as he held her head in his mouth. He held her that way, periodically making a vibrating series of thrusts, for another 49 minutes. At 11:11 PM, he released her and they silently moved off.

I used the receiver to home in on her radio signal in the dark and almost stepped on them as they lay with his head on her hip. I almost stepped on them as they lay with his head on her hip. He jumped up and ran off a short way and then circled back and approached me. He had more confidence in the darkness than he had shown all day. He touched his nose to the end of my telemetry antenna and then walked over to the female.

By now it was after midnight and time to call it a day. I left the happy couple and walked out to a logging road and two and a half miles back to the research center feeling extremely privileged to have learned a little more about the hidden world of black bears.