Peeking into a bear's den with a flashlight is all in a day's work for Dr. Lynn Rogers. He has done it hundreds of times during his 14 years of studying black bears. Dr. Rogers does not carry a weapon when he tracks bears. He carries a stick. It is tipped with a needle that injects the bears with a tranquilizing drug. The tranquilizer puts the bears to sleep so that Dr. Rogers can examine them closely.

Dr. Rogers is a wildlife biologist with the U.S. Forest Service. The information he gathers tells people how much territory wild bears need for survival. It also helps officials decide how to regulate the hunting of bears.

Dr. Rogers studies bears in northeastern Minnesota. He works during all seasons. Last March, 33 students from Prior Lake High School in Prior Lake, Minnesota, hiked to a bear den with Dr. Rogers to watch him.

"The den was under the roots of some fallen trees," said Fiona Keel, 15. "Dr. Rogers quietly brushed the snow away from the den opening. Then he reached inside to inject the adult bear with the tranquilizer."

After about 15 minutes, he pulled the female bear out. He weighed her at 115 pounds (52 kg)* and took a sample of her blood. Then he changed her radio collar. Every March, Dr. Rogers puts new collars with fresh batteries on bears that he is studying.

The group found two cubs inside the den.

* Metric figures in this magazine are given in round numbers.
den. Dr. Rogers gave each student a chance to hold one.

"We tucked them into our coats to keep them warm. They seemed to like cuddling," said Fiona. "When the mother bear started to wake up, Dr. Rogers headed her toward the den, and she crawled back in. He put the cubs in with her and covered up the entrance to the den."

After Dr. Rogers's visit, the mother bear returned to her deep winter sleep for two or three weeks. When the weather warmed, she would bring her cubs out as if nothing unusual had happened.

1 On snowshoes, Dr. Rogers and his wife, Donna, look for a bear they are studying. A tiny radio in a collar on the bear sends out signals. Each collar makes a different signal. Dr. Rogers carries equipment that picks up the signals and helps him find the bear.

2 With one of her three cubs beside her, a mother bear sleeps in her den. Dr. Rogers injected her with a tranquilizing drug. The drug gives him about an hour to weigh the bear and her cubs and to take blood samples. The 2-month-old cubs will get ear tags to identify them. Dr. Rogers will visit the den again in a year. Then the cubs will get radio collars of their own, so they can be studied after they leave their mother.

3 With one arm still in the den, Kristen Anderson, 18, hands Dr. Rogers a cub. The tranquilized mother bear is inside. "The cub was like a puppy—small and soft," Kristen said. "I crawled in to get it. I think the cub was nursing because I had a hard time pulling it out from under the mother." Kristen's class, from Prior Lake High School, observed Dr. Rogers at his work. He handles the bears gently, being careful to disturb them as little as possible.

4 Dr. Rogers keeps track of his bears by radio. Here, he slips a new collar over the head of the mother bear. The collar contains a radio and a new battery. The white cable is an antenna. Dr. Rogers observes bears to find out what they eat and how far they travel. He takes blood samples for medical studies. This bear's den is a hole in the ground. Bears also make their dens under the roots of fallen trees.
A dangling cub weighs in at 3½ pounds (1½ kg). That's a normal weight for a 2-month-old bear. Dr. Rogers weighs each bear. An important part of his study is finding out whether the bears have enough to eat. This cub, out of its den for the first time, is not hurt by the rope around its body. The cub's needle-sharp claws will help it climb trees.
AT THE ENTRANCE TO THEIR DEN, three cubs play around their mother. The adult begins to wake up as the drug loses its effect. This female has worn her ear tags for more than ten years. They give the bear an identification number and list an address for Dr. Rogers. Black bears can seriously injure humans. Only a wildlife expert who knows bear habits should approach a den. Dr. Rogers estimates that he has visited dens, with caution, hundreds of times.