

# Wolf dens provide information about pup survival

By Duluth News Tribune, adapted by Newsela staff

From somewhere in the dark recesses of the den came nearly inaudible squeaks and whimpers. Carolin Humpal, a wildlife biologist for the state of Minnesota, peeked inside.

There were five 2-week-old wolf pups.

Humpal and her team had come to examine the pups. The team placed a trail camera outside their den. Their research is part of an effort by Minnesota's government and Native American tribes to better understand the state's wolf population.

## Monitoring Dens And Counting Pups

John Erb is a wolf research biologist on the same team as Humpal. They all work for the Minnesota Department of Natural Resources (DNR). Spotting pups through a trail camera is part of their broader plans for wolf monitoring. He says, "the pup part of it is kind of a pilot project. We're trying to get some experience with locating dens." They are looking at new ways to monitor dens and count pups.

The work eventually will help wolf researchers monitor pup survival and what things influence that survival.

Along with Humpal on this mission to find wolf pups on a mid-April afternoon were wolf research biologists Barry Sampson and Mike Schrage, and a technician, Terry Perrault.

## Long Time To Locate The Den

Just finding the den was a challenge. It took nearly an hour to locate the den. We worked from mapped GPS-tracking movements of a radio-collared adult wolf in this pack — though not the pups' mother. Schrage had led us to a patch of wood to look for a hole in the ground with freshly excavated dirt all around.

“Found it!” Sampson called out.

He and Humpal assumed the wolf that had given birth to these pups was not far away, and would be observing our visit and waiting for us to leave.

“They were all piled together,” Humpal said. “It was still fairly chilly, so they have to be huddled up together to share body heat.”

The pups’ eyes were open, indicating they probably were a couple of weeks old, Sampson said. Although they moved away from Humpal a bit, she said the plump little furballs didn’t struggle as she picked them up one at a time and handed them out to Sampson.

## **Minimal Disturbance To Wolves**

Perrault eased the pups into soft flannel bags. He weighed them quickly — about 3 1/2 pounds each. Schrage recorded the pups’ weights and genders — four male, one female. One by one, the pups went back to Sampson, and then to the waiting hand of Humpal, who still was mostly inside the den.

The biologists performed their tasks quickly and in hushed voices. These intrusions into dens are kept to a minimum, Sampson explained, to ensure minimal disturbance to the wolves.

The biologists completed the work in less than 15 minutes. They hung the trail camera and smoothed the dirt at the edge of the den. The pups were all in a heap again.

Their mother was never seen.

So far, researchers have visited and examined pups in 12 to 15 dens over the past three or four years. Pup counts and pups’ survival are not needed for the DNR’s wolf population estimates, but tracking birth and death rates are. This information can help the agency make better population models, he said.

## Will The Mothers Move The Pups?

Also, Erb says understanding how the wolf pups live can help researchers. They can relate that information to other wolf population factors such as number of prey or the presence of parvovirus, a deadly virus that some wolves get.

Sampson said that after visiting the den site, they didn't know how their visit affected the pups' mother.

"There's no doubt she's going to know we've been here," Sampson said. "The question is whether it's enough to make her move them."

"Any time you visit the den of an animal, at some level there's an effect," Erb said. Their research suggests that some mothers will move their pups to a new den after a visit.

But there's no information yet, he said, that it has any important effect on pup survival. They haven't seen an effect in studies that have deployed radio-collars on pups or surgically implanted radio-transmitters in the pups.

Often, wolves change den sites even when humans don't enter the sites, he added.

A wolf pack and its pups typically remain at a den site through early to mid-summer. Later in summer, the pack often moves to a rendezvous site. The pups are mobile, but not hunting. When pups are large enough, the meeting site becomes less important. By then, the young wolves are traveling more with their parents.

According to the DNR's research, Minnesota has an estimated 374 wolf packs. The average number of wolves in a pack at mid-winter was 5.1 in 2015, according to the agency. Pack size typically doubles once pups are born in the spring. But not all of them survive through the next year. The number of wolves usually goes back down to about the same number as the past winter.

**Quiz: Wolf dens provide information about pup survival**

**1. Complete the sentence.**

The author mainly explains the purpose of wolf pup research by

- A) observing and interviewing the scientists who are studying the wolves.
- B) providing detailed descriptions of the reports that scientists have written about wolves.
- C) explaining why the government and Native American tribes have supported this research.
- D) describing how radio transmitters are surgically implanted in the pups.

**2. Which of the following words, if it replaced "pilot" in the second sentence below, would CHANGE the meaning of the sentence?**

*"Spotting pups through a trail camera is part of their broader plans for wolf monitoring. He says, "the pup part of it is kind of a pilot project. We're trying to get some experience with locating dens." They are looking at new ways to monitor dens and count pups."*

- A) preliminary
- B) trial
- C) on-going
- D) test

**3. In the introduction [paragraphs 1-3], Carolin Humpal is introduced in what way?**

- A) through a comparison of different types of wildlife research
- B) through an anecdote so that readers can visualize her research
- C) through a history of wolf research in Minnesota
- D) through a description of the importance of wolves in Native American culture

**4. Read the following sentences from the article.**

*"Later in summer, the pack often moves to a rendezvous site. The pups are mobile, but not hunting. When pups are large enough, the meeting site becomes less important."*

Which word from the selection helps the reader to define "rendezvous"?

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- A) pack
- B) mobile
- C) large
- D) meeting

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**Answer Key: Wolf dens provide information about pup survival**

1. A
2. C
3. B
4. D

1 Read the blog post. What is co-working? What is the writer's attitude toward it?



## Co-working



It's not easy to work in the same place you live, which is why more people without a traditional employer have been turning to co-working in recent years.

Co-working spaces are communal places that offer the amenities of a corporate office at a much lower cost. For a monthly membership fee, you get access to a desk, meeting space, Wi-Fi, and a printer.

Not only is it much easier to start up a new business at a co-working space, but you can make your own schedule without all the distractions of home. Co-working gives you the structure of an office with the flexibility of working from home. Nobody is going to insist on you arriving at 9 and leaving at 5!

You also join a community of professionals. Being around busy people helps you do your work more effectively without the loneliness of working from home.

Co-working provides an opportunity for interaction with professionals with different jobs, so direct competition isn't a problem. Because they have varied skills and viewpoints, your "co-workers" may be able to suggest solutions to problems you encounter. Conversation can turn into collaboration. Arguing for a decision with someone who doesn't care much about the outcome can provide you with clarity.

Emotional support is another advantage. You may not be sure whether your business

will succeed. Surrounding yourself with other entrepreneurs allows you to bounce ideas off of them and overcome moments of self-doubt.

The spirit of collaboration is strong in many co-working places, which often include cafés with free coffee or snacks. Some have gyms. One co-working space near Boston even has a rock climbing wall! Members of co-working places are encouraged to socialize. This can foster a sense of community.

Imagine you're an entrepreneur working from home. You sit at the kitchen table with your laptop in front of you, trying not to look at the nearby pile of papers, a carpet that needs vacuuming, and a sink filled with dirty dishes. Wouldn't you prefer to work in a clean, uncluttered space with the conveniences of an office?

In New York City, a 100-year-old group of 16 buildings called Industry City has been transformed from a distribution and shipping center into a co-working space. A three-dimensional printing company called MakerBot was one of the first tenants, but Industry City isn't just a tech center. A lot of the start-ups involve food and share kitchen space.

"People want to make things again," said Industry City's chief executive officer, Andrew Kimball. "There are new technologies and a real consumer interest in locally made products. That has led to an explosion of demand for space and the creation of communities in which these innovators are next to each other."

Will co-working work for you? If you are open to something new and value working among other people, it could be a perfect fit. Yet another benefit is that if you find the situation unacceptable, you're not stuck with a lease or a mortgage. You can try co-working somewhere else or even return home.

—adapted from *Savoring Gotham: A Food Lover's Guide to New York City* edited by Andrew F. Smith

**2** Read the blog post again and find the imaginary scenario. Answer the questions.

- 1 What word introduces the scenario? \_\_\_\_\_
- 2 What is the last word of the scenario? \_\_\_\_\_
- 3 What person is the scenario written in: first, second, or third? \_\_\_\_\_
- 4 What tense is the scenario written in? \_\_\_\_\_
- 5 Why do you think the writer included an imaginary scenario?  
\_\_\_\_\_

6 Do you think the scenario is effective? Why or why not?  
\_\_\_\_\_  
\_\_\_\_\_

**READING: Practice**

**3** Read the blog post again. What are some advantages of co-working that the writer mentions?

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

**4** Choose *True*, *False*, or *Not Given*.

- |   | True                     | False                    | Not Given                |
|---|--------------------------|--------------------------|--------------------------|
| 1 You have to pay a fee every year for a co-working space.              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 You have to pay extra money if you want to have a meeting.            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 Wifi is included with your co-working fee.                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 Co-working is popular only in cities.                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 There isn't a lot of competition between people in co-working spaces. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 Industry City is a distribution and shipping center.                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 Industry City has a variety of business types.                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 Many people are eager to work in co-working spaces.                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

