

Bighorn sheep makes extraordinary journey

ROB ALEXANDER RADIUM

Last spring, while other bighorn sheep from the Radium Hot Springs area moved into high country in the Rocky Mountains, at least one collared ewe decided to take a road trip.

Instead of following the herd into the Rockies, which is where most of the Radium sheep go for summer forage and lambing grounds, this roughly three-year-old ewe, known as F526, disappeared for nearly seven weeks.

Parks lost track of the ewe in late May and it didn't turn up in the Radium region again until mid-July, according to Alan Dibb, a Parks Canada wildlife specialist based in the Lake Louise, Kootenay and Yoho region.

Researchers were left scratching their heads until they retrieved the Global Positioning System (GPS) tracking collars from the 10 collared sheep, including F526.

"This animal disappeared off our radar screen for a period of time and we couldn't figure out what was going on, but it showed up again later on in the typical summer range used by other females. We didn't find out where she had gone until November and we took the collars off," Dibb said.

With the data in hand, Dibb and his staff learned that, instead of travelling to the closer summer ranges in the Rockies, ewe F526 instead travelled across the Columbia Valley to the Purcell Mountains. But to get there, the ewe had to cross all of the physical barriers in the valley bottom including the highway, railway, the Columbia River, farms and 12 kilometres of forest.

Based on the data collected by the GPS collar, the ewe left Sinclair Canyon, which is just east of Radium, on May 20 and travelled north, taking two days to reach Baptiste Lake. She crossed the highway, railway and swam the Columbia River on May 23, reaching the river's west bank at 9 a.m. She immediately headed southwest and quickly crossed a large part of the valley. The ewe turned northwest at 5 p.m. and reached the eastern edge of the Purcells by 11 p.m.

Once she reached the Purcells, the ewe travelled less and Dibb said her movement was consistent with a ewe looking for a safe location to have a lamb. But he added he's not certain if the ewe did have a lamb or not, as by the time the ewe turned up again in the Radium area she was alone.

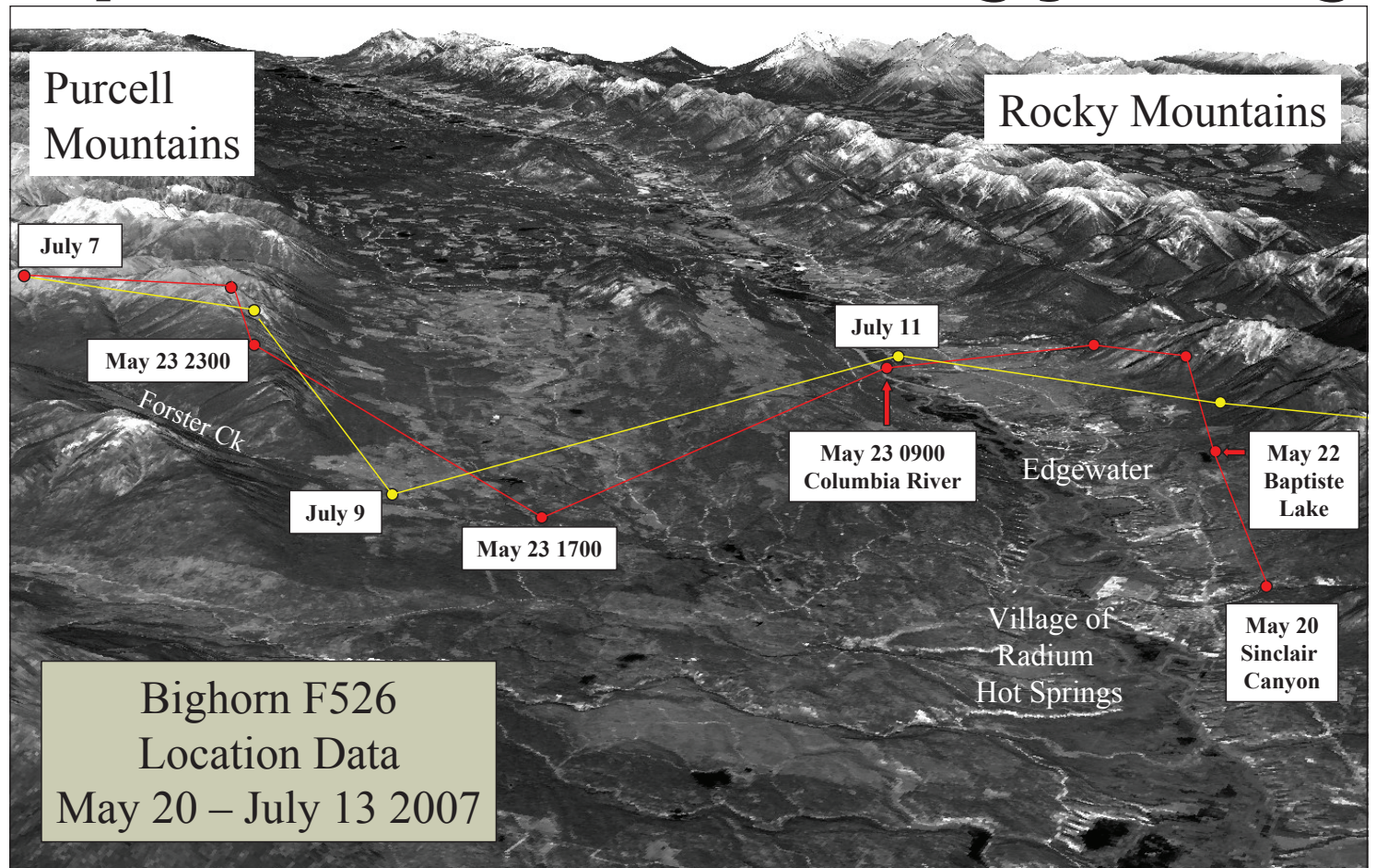
"After six weeks and hundreds of kilometres of travel she managed to come back to roughly the same spot and somehow she managed to navigate through mostly thick forested terrain to get right back to the same spot she crossed before. That says something about the ability of these animals to navigate, which I think is quite impressive."

Dibb does not know if ewe F526 travelled to the Purcells alone. He said it is possible that she was travelling with other females, but as he does not have any eyewitness verification, he said he couldn't be certain either way.

What he does know for certain is that F526 is the first ewe out of 60 sheep collared so far during the first six years of the 10-year study to make the journey to the Purcells.

And even though this is the first documented instance of a Radium sheep undertaking a long journey, Dibb said it didn't come as a complete surprise.

"It's a fair bit of inhospitable territory from a sheep's perspective to cross there, but having



COURTESY OF PARKS CANADA

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said that, I wasn't totally surprised because we have received reports from reliable observers that they have seen sheep in the Purcells," he said, adding he wasn't certain if those sheep were connected to Radium or not.

But the puzzling aspect of the wandering ewe's choice of location is the reason behind a sheep's decision to cross the Columbia Valley rather than going into high country in the Rockies.

Dibb said the ewe was likely returning to her ancestral lambing grounds.

"It may be that some of these sheep are following routes of previous sheep. Sheep follow other sheep," he said, adding pregnant ewes tend to use the lambing grounds of their mothers.

As sheep are making this journey, Dibb said it opens new management challenges for wildlife managers, as they have to find ways to keep wild sheep from coming into contact with domestic sheep. Domestic sheep carry bacteria that can be lethal to wild sheep. The other challenge is to maintain an open corridor.

Above, the route a bighorn sheep ewe – much like the one to the right – followed when she left Radium and crossed the Columbia Valley last summer, possibly in search of safe lambing grounds. She returned to Radium in mid-summer roughly following the same route.

Parks has been capturing and collaring 10 members of the Radium herd each year for six years now as part of a research and monitoring program being used to help wildlife and land managers understand where the bighorn sheep go and how they respond to habitat restoration.

"We wanted to identify these routes sheep use to move back and forth on the assumption that those would be potentially good candidates for future restoration work or prescribed fire work," he said.

An advantage of working with sheep is that they have a tradition of using the same ranges and as Parks gains a better understanding of where the sheep go, researchers learn where to direct restoration efforts.

Parks used mechanical thinning in 2003 and followed up with prescribed burns in 2005 as a means to improve sheep habitat in the Radium region. So far, Dibb said, the sheep are making significant use of the restored areas, but mostly in the spring and fall.

Another objective Parks has for this long-term project is to keep the Radium herd from wintering in and around the hamlet. Currently, sheep can be found grazing on lawns, golf courses and in highway medians throughout winter.

"This particular sheep herd is unusual in some respects, regarding how much use they make of artificial habitats and their willingness to use sites that are relatively far from escape terrain.

"They're quite willing to tolerate people, vehicles, even barking dogs in Radium. They



OUTLOOK FILE PHOTO

are somewhat habituated to that and they don't seem to be averse to spending time in relatively flat areas and normally wild sheep are associated in proximity to steep, cliffy terrain," Dibb said.

Moving the herd out of Radium and away from Highway 95 would not only help reduce their tolerance to humans, but it could have the added advantage of reducing the number of sheep killed each year on the highway.

And by restoring habitat, Parks can keep sheep from abandoning their migration altogether.

"We think there's some urgency to restore these corridors for sheep before they do become more sedentary and stay in and around the village year round. We don't want that to happen. We want to be proactive in addressing some of these intermediate habitats," he said.