

SONG DOGS

UNDERSTANDING JACKSON HOLE'S MOST MUSICAL RESIDENT

WORDS Melissa Thomasma | IMAGES David Bowers, Madison Webb and courtesy Franz Camenzind

It begins with a lone canine voice, a melancholy sound as the shadows grow longer across the valley floor. Another joins, and another; a chorus of untamed canines yipping and singing. In the crepuscular stillness, from hills far away, another group responds. Back and forth the tune ricochets — the sound of the wild welcoming the night.

These vocalizations are far from random or without purpose, explains biologist and coyote expert Dr. Franz Camenzind. "During my research on the coyotes on the National Elk Refuge, I identified seven different kinds of vocalization, each with distinct associated behavior," he explains, noting that coyotes make different sounds for different purposes, from establishing territory boundaries to reinforcing pack social bonds. Their songs are a critical piece of survival on the Wyoming landscape — a discovery largely made by Franz.

As long as ranchers have raised livestock in the West, they've had a troubled relationship with predators. When Franz came to Jackson Hole in the summer of 1969, he wanted to study coyotes with a fresh perspective. "There was a lot going on back then trying to control coyote populations," he reflects. "A great deal of data had been collected on food sources and reproductive patterns. Those were well-studied, but there was a major lack of understanding when it came to what do coyotes do?" Franz wanted to know how coyotes interacted with one another and with the ecosystem around them when they weren't impacted by humans. And the National Elk Refuge was the perfect spot to study that. Franz spent the next six years watching very carefully.

"In other places, it's hard to watch coyotes for a long time. They're fairly shy of humans," says Franz. The canines around Jackson, however, proved to be less wary of people since they weren't threatened by hunting in protected places like the national parks and the National Elk Refuge. The latter area provided an ideal space for long-distance observation of coyotes — it's possible to watch an animal and gather an understanding of its behavior without disturbing it.

"I spent hundreds of hours looking through a spotting scope. I remember long winter days out there just watching a coyote take a nap," chuckles Franz. "I would wrap up in sleeping bags and sit on top of the haystacks of elk feed with a scope propped up against my face." Ultimately, all those hours of observation revealed groundbreaking information.

"The biggest thing that came from my research is that when they're allowed to live their own lives, the majority of them form small packs or live in pairs," summarizes Franz. Once thought to be extremely solitary animals, his research showed that the social structure of coyotes is complex and dynamic. About 60 percent of coyotes form small packs of up to seven animals, and another 25 percent live in bonded pairs.

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"They don't *need* to be in packs necessarily, but around here it functions well. It's easier to guard a food source and protect territory when you have a team," he explains. And one tool for keeping the team running smoothly? Yipping and howling.

Franz explains that especially during the summer months, pack members will strike out on short hunting trips alone. "If you hear a solo coyote howling in the summertime, it's typically one of these animals who is 'checking in' or letting the rest of the pack know where he is." What's particularly fascinating, is that he's watched other packs completely ignore the song of a lone coyote on a hunting mission, while the animal's own pack will offer a response. "What that says to me is that they know exactly who their pack members are," he says. "Individual animals could identify who was talking to them."

In addition to being a tool for long-distance communication, vocalization also provides an opportunity to support the structure of the pack. "It brings them closer, literally. They'll circle around the dominant animal and howl up to them. It's a way to reinforce their social bond," Franz says.

Studies in the years since Franz's groundbreaking work on coyote behavior have supported his discoveries. Further work has underscored another important point: Coyotes, if left to their own devices, will control their population size; they will not continue to reproduce in an unlimited way. This means that killing coyotes indiscriminately to protect livestock is not the solution it was thought to be.

"Coyotes aren't the big villains they're made out to be," says Franz. He acknowledges that as opportunistic hunters, they can certainly present a threat to livestock during spring calving season, but that during other times of the year, coyotes can actually help ranchers. "They really do a lot by killing ground squirrels and mice that eat forage," he says. They also provide what ecologists call "ecosystem services" — they help remove dead elk and deer from the landscape.

"Thankfully, I have seen a shift in the valley toward more coyote tolerance," says Franz. He's glad to see, at least here in Jackson Hole, that people can appreciate and celebrate the coyote for its important role in the wild ecosystem. And he hopes that when the evening rolls in, and they start to fill the valley with their songs, we too will be reminded of what resilient and fascinating creatures they are. ■

