## The Wolves of Transylvania



by ALAN E. SPARKS

A captive Eurasian wolf near Zarnesti, Romania.

&C Promberger

Sitting on rigid benches in the stark, cold classroom, bundled in winter coats and hats, the small group of sixth graders listens attentively as Simona Buretea describes ways to publicize the presentation they will give to the village next week. The meager heat from a wood stove is lost in the immensity of the large, whitewashed classroom. Hanging crookedly on the wall is a tattered map of the world, depicting nations that haven't existed for half a century.

Through the tall windows, which rattle and sing as gusts of wind seek entry through the loose fittings and cracked panes, can be seen the spectacular panoramic view that graces this small Transylvanian mountain village of Pestera. Farmhouses are scattered on rolling hillsides or perched precariously along the spines of ridges, seeming to hang in the thin, invisible air that blows cold from the snowcapped peaks beyond. As the students walk to school, which is an hour-anda-half journey for some, their hearts quicken from more than just the exertion and the beauty of the scenery...for they hear stories.

It is a thawing spring day in 2003. Simona is the public awareness officer for the Carpathian Large Carnivore Project (CLCP), a non-governmental organization that conducted research in Romania on the behavior and ecology of wolves, bears and lynx from 1993 until 2003 to help conserve the unique natural heritage of the region. She has commissioned the students to investigate stories going around the village about wolf attacks on people. No computer or Internet is available to aid this task—the children must query their relatives and friends, discovering who told whom what, trying to trace the stories back to the sources.

The 27,000 square miles of forest carpeting the Carpathian Mountains of Romania, which cradle the Transylvania plateau like a giant arm, contain the most significant populations of large carnivores in all of Europe west of Russia. Around 2,500 wolves live in Romania (over 15 percent of Europe's wolf population, excluding Russia), and about 5,000 European brown bears and 1,800 Eurasian lynx live there as well, even though, with 22 million people residing in a little more than the same area, Romania is about four times more densely populated than Minnesota.

It is commonly believed in Romania that wolves are dangerous to humans. The fear is rooted in wolf-attack stories that circulate until they become unverifiable folklore. An investigation of 41 such stories in the last half century confirmed eight were based on factual events, but in every case the wolf was either rabid or injured, or trapped or cornered and defending itself from attack. There were no serious injuries to humans.

At their presentation the students of Pestera report their results to a rather boisterous and skeptical audience: none of the wolf-attack stories could be verified. Historically, however, there are significantly more official reports of wolf attacks in Eurasia than in North America, possibly due to millennia of wolves being habituated to the proximity of humans—including the scavenging of human corpses left during frequent wars. But some researchers believe most cases involved rabid or captive wolves, or wolves defending themselves.

The wolves of Romania are "Eurasian wolves," Canis lupus lupus, a subspecies which prior to the 20th century ranged over most of the vast super-continent-from Western Europe and Scandinavia eastward through Russia, Central Asia, southern Siberia, Mongolia, the northern Himalayas and China—but now reduced in extent due to human persecution and loss of habitat, especially in the West. The Eurasian wolf is believed to descend from canids that migrated from the North American continent across the Bering Strait when it was land or ice, possibly in multiple waves beginning at least two million years ago. After evolving into wolves, some migrated back to North America, possibly also in multiple waves.

Like elsewhere, wolves in Romania help maintain the diverse composition and dynamics of the ecosystem. But also like elsewhere the long-term prospects for large predators depend on human values.

Clouds enshroud Carpathian Mountain peaks near the village of Poienile de Sub Munte in the Maramures region of northern Romania.

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Eurasian Lynx

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## The wolf's ancestry

The modern gray wolf subspecies of northern and central North America probably descend from a relatively recent wave, as gray and Eurasian wolves are more closely related to each other than to smaller wolves inhabiting the southern fringes of wolf range on each continent. As in North America, the average size of wolves in Eurasia varies geographically, generally increasing toward the north. The Romanian wolf is of intermediate size, most adults weighing between 75 to 130 lbs (34 to 60 kg). Average pack size (around five) and territory sizes (between 80 and 300 sq km; 50 to 186 miles) tend to be smaller than typical of most wolf populations in northwestern North America.

After World War II nearly 5,000 wolves lived in Romania, ranging over most of the country. Livestock depredation was excessive, so the Communist government sought to reduce predators via hunting and trapping and the use of poisons and bounties. By 1967 the wolf population had fallen to about 1,550-although, like coyotes in America, jackals began to invade lowland areas where wolves had been eradicated. Then the new dictator, Nicolae Ceausescu, an avid bear hunter, instituted rigorous measures aimed at promoting his quarry, including banning poisons and firearms and protecting habitat.

Wolves and their wild prey benefited, and their numbers began to rebound. When the Communist regime fell in 1989 the protections ceased, and the large predators soon faced the same pressures that had decimated their numbers in most of the rest of Europe. Conforming to European biodiversity and conservation goals, Romania restored protection to wolves in 1996, although limited hunting is allowed, and enforcement is problematic.

Today the carnivores of Romania are relatively tolerated despite Romania's being a developing country (average per capita net earnings about \$3,300 per year in 2008; lower in rural areas) with an economy significantly dependent on livestock. Agriculture

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accounts for about 12 percent of the economy, employs about 30 percent of the labor force and in the Carpathians still sets the rhythm for an ancient way of life. Rolling slowly along the country roads are horse-drawn carts carrying towering loads of hay or bundles of sticks for firewood, or groups of peasants to work the fields. Cows, horses, goats and sheep are still herded through the main streets of villages and towns, frustrating the drivers of cars rushing to meet their appointments in the hectic pace of the "new economy," which is just beginning to challenge the ancient rhythms.

But whether marching to old rhythms or new, it is the attitudes formed over centuries of coexistence and conflict with livestock that still dominate the feelings about wolves in

Romania. Wolves and bears take about 1.2 percent of the 5 million sheep that graze the mountain pastures during late spring and summer. This loss is a significant burden to people so dependent on livestock (compensation is not provided). Antipathy toward wolves results, but a campaign to eradicate every last wolf never occurred in Romania. Wolves that attack livestock may be legally killed if evidence is provided, and some are illegally shot, snared or poisoned. However, the primary defense against predators is the use of large, aggressive shepherd dogs. Portable electric fences have also been shown to be very effective, although they are beyond the means of most shepherds.

While wolves will prey on vulnerable livestock, and occasionally on dogs and small animals such as hares and rodents, the primary diet of most wolves most of the time in Romania consists of the three wild ungulate species: roe deer (*Capreolus capreolus*), red deer (*Cervus elaphus*) and wild boar (*Sus scrofa*). There is no evidence suggesting wolves in Romania are limiting wild ungulates at depressed levels (although recent heavy poaching may be); nevertheless, wolves can be perceived as competing with human hunting (a source of much needed foreign revenue).

## Managing wolves

Romania is divided into over 2,200 game areas managed to maintain game populations at levels determined according to environmental and social conditions. Hunting quotas are set



per area, and when predation of wild ungulates or livestock is considered too high, wolves are also targeted. Yet managers do allow significant numbers of wolves in the areas, consistent with national conservation goals, and many hunters in Romania accept this, both because they value predators as game and because they believe predation improves the health and trophy quality of other game species.

Like elsewhere, wolves in Romania help maintain the diverse composition and dynamics of the ecosystem. But also like elsewhere the long-term prospects for large predators depend on human values. Viable wolf range in Romania is essentially saturated. Around 30 percent of wolf mortality is caused by intraspecific strife, about 300 wolves a year are legally shot (the total hunting/lethal-control quota for 2009-10 was 466), an unknown number poached, and there have been proposals to allow landowners to kill wolves regardless of whether they are actively depredating on domestic

animals. Nevertheless, while there has been a modest decline recently (probably due to increases in livestock and poaching of wild ungulates), the wolf population has been relatively stable over the past dozen years, and it is the destruction of suitable habitat that is the greatest threat now facing wolves in Romania.

For such a densely populated country, the amount of undeveloped land is remarkable. People primarily dwell in cities, towns and villages, and suburban sprawl is rare. The forests, however, are permeated by access roads for logging, hunting and livestock, and many wolves live close to humans. In the late 1990s a radiocollared wolf ranging the forests adjacent to the large city of Brasov was discovered routinely entering the city at night with her pack to raid a trash dump for food, most people never aware of their presence. Since opening to the West, the natural beauty of the Romanian Carpathians is attracting new residents and tourists,



leading to increased development of infrastructure, roads and summer homes.

In southeast Transylvania lies the ex-factory town of Zarnesti, which is at the center of recent efforts to realize economic benefits from the presence of wolves and other wildlife. To tap the lucrative ecotourism market, a tourguide training program and businesses such as guesthouses, horseback riding and mountain-bike rentals have been established. While a small beginning, the local revenue generated by tourists attracted to the region's natural heritage—and especially the elusive large carnivores-already exceeds the costs of depredation and livestock protection. Consequently, local attitudes toward wolves have turned more positive. However, as long as people bearing the costs aren't always the ones realizing benefits, controversy will remain about the merits of this equation.

The case of the real Transylvanian wolves, as opposed to those so horrifically depicted in mythic images, demonstrates an ancient, yet evolving, coexistence between people and wolves even under difficult economic circumstances rife with potential conflict. While the presence of wolves in Romania presents challenges, economic benefits are being realized and conflicts resolved through increased understanding of wolf behavior and awareness of the needs of the people who share the remarkable landscape.

© 2010 Alan E. Sparks has lived and travelled extensively in Central and Eastern Europe, writing, teaching English, and working on wildlife research and ecotourism projects; he is the author of Dreaming of Wolves: Adventures in the Carpathian Mountains of Transylvania.