

THE GREAT BEARS OF BOSNIA

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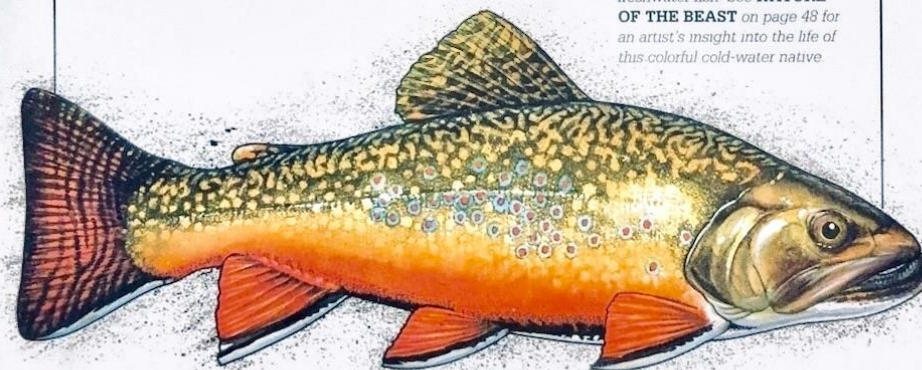
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The War and *Ursus* *Arctos*



After a decade of Balkan warfare that devastated both human and wildlife populations, Bosnia's Great Bear and its beleaguered refugees wander home together.

By Julie Poucher Harbin



Opposite page: A family of Balkan bears. Above: Bosnian refugees.

Early on a crisp November morning, the road to Donji Malovan is dark, cold and getting colder. As the temperature drops with the dawn, a Land Rover's headlights bounce across the rambling main highway that cuts through central Bosnia. Now paved and code named "Gull" by NATO forces, this route has been traveled since Roman times. But during the 1992-1995 war between Bosnian Serbs and Croats, it was not so much a road as a twisted pipeline of **d e a t h a n d d e s t r u c t i o n .**

Amidst the trash and broken bottles that litter the roadside, flowers are laid at a black marble plaque etched with an image of a soldier. A few tanks stand in mute defiance at the old army base, and just over the horizon the roofless, bullet-ridden homes and battered stables are watched over by crude gun emplacements.

Despite such carnage, the bruised Bosnian countryside is healing itself, and, as the sun begins to rise, it is clear that this is a fundamentally wild and beautiful land, a harsh plateau encircled by forest. Before the war, a farming and logging com-

munity flourished here. But even though the savagery ended more than five years ago, only now have its many refugees begun to sense that it is safe enough to come home.

Stipe Čičak, a humanitarian aid worker with UMCOR (United Methodist Committee on Relief), cranks the steering wheel to the right and gingerly guides his Land Rover up the winding, rocky road toward the small village of Donji Malovan. Tires, pipes, beer cans, broken glass and the rusted skeletons of old cars pollute the landscape. Čičak is careful not to stray off the path for fear

of having his vehicle reduced to shrapnel by one of the many anti-tank mines that lie buried all around him. In recent months, Čičak and his co-workers have facilitated rebuilding Donji Malovan, and this morning they have come to see if the few refugees who returned here last spring are ready for winter.

During the war, every member of the 122 families who lived in this and a neighboring village either fled or were killed. Many of the dead are buried in the surrounding hills, others in mass graves in undiscovered places. Fifteen of the surviving

families returned last spring, and 15 more were expected by winter.

People, however, are not the only returnees. Donji Malovan sits about 1,200 meters above sea level in the thickly forested hills of Mount Malovan (1,600 meters elevation), which is part of the Dinara mountain range. The village is part of the municipality of the town of Kupres in wild, western Bosnia, historic homeland of the nation's proudest natural symbol — the European brown bear.

More than half of Bosnia's bears have historically reigned in these mountains, which also teem with wild boars, foxes, wolves, rabbits, reindeer and grouse. But when the war came, much of the region's wildlife, including its bears, fled the area or were killed.

After the war, the Bosnian government instituted a ban on bear hunting in the hopes that the bears would come home and safely reproduce. It worked, and, last year, wildlife observers began to notice the bears making a comeback. That revival, however, has often been to the dismay of Bosnia's beleaguered rural refugees, who have been returning alongside the bears to a land whose abundant fruits have

bloomed in their absence.

Alan Smith, a former British soldier who has been working as a deminer in Western Bosnia since war's end, says that to his surprise the bears — not land mines — were what returnees were complaining about when he was there last fall. As he said about one November

"There was bear s—t on the foot paths, claw marks on the trees, and all the plums in the village were gone."

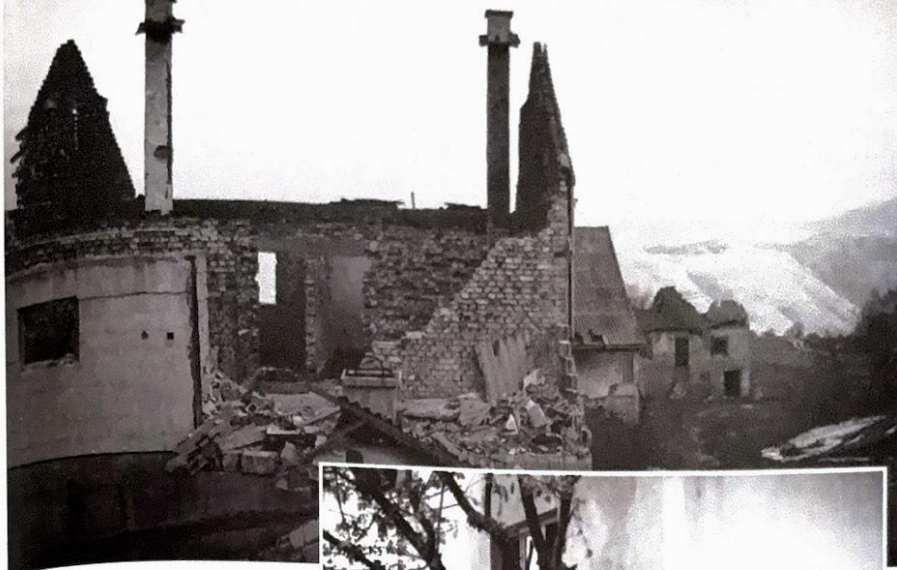
visit, "There was bear s—t on the foot paths, claw marks on the trees, and all the plums in the village were gone."

Mirko Kanlić is a 70ish Bosnian Serb man who knows that scenario well. He came home to Donji Malovan last May and recalls the first time he knew the bears had come back, too. "The bear came and he had a feast on all the fruits in the area," he says. "We didn't hear him come, but in the morning we saw his tracks and other signs

that he was there, like the missing plums on my plum tree."

Kanlić, dressed in a blue wool cap and jacket to ward off the chill, invites aid-worker Čičak and several other visitors into his brother's house, a one-room construction adjacent to his own home, which, come this winter, should be rebuilt with functioning utilities in time for his wife and son's arrival. The lines on his rugged face warm to a smile as he leads his guests into a temporary living space, sparsely equipped with a wood stove, two army cots and a couch. There is no electricity, and no running water. Nonetheless, he and his neighbors are grateful that their new houses will no longer look like those across the way: shelled, crumbling wrecks hovering over broken stoves, unexploded rockets, ammo boxes, shattered mattresses and musty fatigues.

Before the war, Kanlić says, the villagers made cheese for a living. And they have started making cheese again as they slowly accumulate livestock. Kanlić does not yet have any animals, but he is grateful for what Nature has given him: plums, apples and rose hip growing by his house. Unfortunately, he isn't the only one living on this bounty.



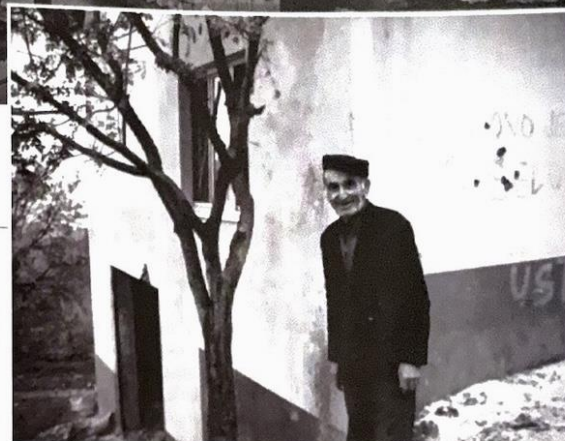
Right: Villager Mirko Kanlić professes little faith that the Bosnian government can protect him from bears that threaten his livestock and plum trees (shown).

"While there was fruit to be picked [the bear] was always here, but as soon as the fruit was gone, he'd eaten it all and he wasn't heard from again," Kanlić says, adding with a laugh that the bear isn't gone for good. "He's still somewhere in the forest, on the periphery...."

Before the war, Kanlić and his neighbors had big problems with bears. He says they would climb up on someone's roof, stable or house and make an opening, then jump inside and steal something, usually a pig or sheep. So far, though, the bears have not gotten into the houses or stables.

Right now, there's not much to steal.

However, as more livestock and orchards are damaged by returning bears, Kanlić feels there is not much he can do about it. In Bosnia and Herzegovina it is illegal to shoot nuisance bears. If bears attack your farm animals, the local and federal governments are supposed to pay compensation. But Kanlić admits to little faith in preventive measures or the compensation system.



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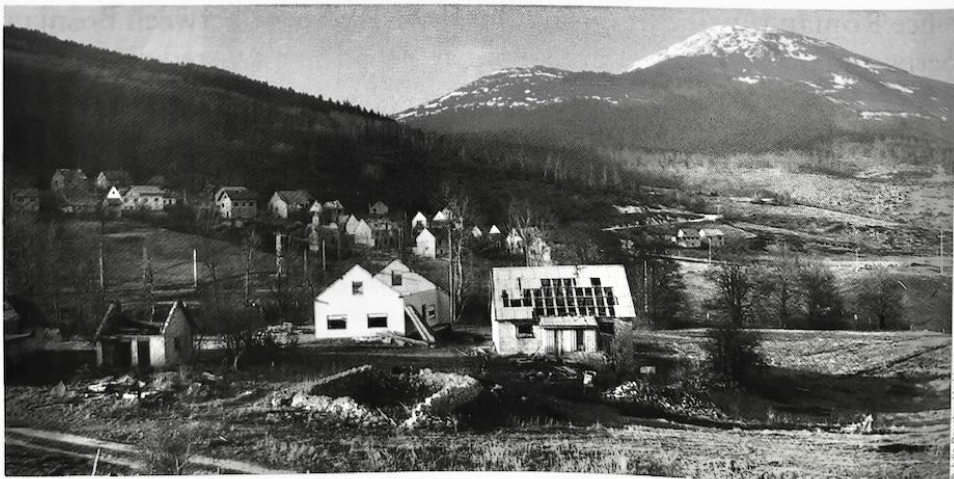
Remembering the prewar days when bears were plentiful, he says, "There is no love for the bears."

High atop Blazenica mountain north of Kupres, Marko Čaleta adjusts his Robin-Hood style wool hunting hat, pulls out his binoculars and looks toward the west. As assistant director of the game and ecology section of the local forestry department, Čaleta is searching, as he always does, for "what's new in the forest."

Čaleta understands the villager's concerns, but he says it will be awhile before brown bears reach their prewar numbers both in Donji Malovan and in the country as a whole. Bears all over Bosnia suffered

during the conflict, and their numbers were drastically reduced. Čaleta estimates that about 30 percent of the bear population in Bosnia migrated to the northern part of the Dinara mountain range, in Croatia and Slovenia, and even to Austria. Another 15 percent to 20 percent were killed during the war by land mines and forest fires, or they were shot by the army or poachers for food and sport. Now, Čaleta estimates, there are about 10 to 12 bears in the Kupres area, compared to 25 to 30 prewar.

Nationwide, the bear population may be as low as 250 individuals, down from 1,364 before the war. Researchers estimate that it may take 20 to 30 years to reach those num-



Bombed-out Donji Malovan, above and right, rests in the heart of Balkan bear country: the Dinara mountains.

The biggest threats to Balkan bears are from road and rail traffic, land mines, dump-site contaminants, and illegal shooting from villagers who feel threatened. **Right:** Croatian bear researcher Dr. Djuro Huber with a train-killed bear. **Far Right:** A mine field near Donji Malovan.



BIOLOGY 101

The bears that inhabit Bosnia and Herzegovina are commonly known as brown bears, "mrki medved" in the local language. Their scientific name is *Ursus arctos*, and they are a cousin to the North American grizzly, *Ursus arctos horribilis*.

The brown bear is the most widespread bear in the world, with a distribution in Europe, Asia and North America ranging from northern arctic tundra to arid desert. Europe's 14,000 bears live in small fragmented habitats that are dwindling as human populations expand.

Bosnia's brown bears, like most European brown bears, are found inland and do not reach the extreme body sizes typical of coastal populations that have access to protein- and lipid-rich salmon, as in Alaska and the Russian Far East. A comparison of data from Eurasia and North America showed that the European brown bear is much less aggressive than the North American brown bears and those east of the Ural Mountains.

Bosnia's brown bears are internationally recognized as part of the Alps-Dinaric-Pindos population that stretches from the eastern Alps in Austria and northeastern Italy in the north, to the Pindos Mountains of Greece in the south. About 2,800 brown bears inhabit Austria, Italy, Slovenia, Croatia, Bosnia and Herzegovina, FYR Macedonia, the Yugoslav Federation, Albania and Greece. — J. P. H.

bers again, but they are hopeful as they see the brown bear population in Bosnia and Herzegovina slowly being rejuvenated. Bear numbers are likewise growing again in the neighboring country of Croatia, which was also hit by the war. Nonetheless, in a landscape as ravaged and altered as Bosnia's, the brown bear is still in danger.

Čaleta estimates that, in his region, about 5 percent of the current bear population continues to suffer from land mines, though he says they do use their intelligence to negotiate the areas as they return. "Bears tend to sense from their predecessors being killed in certain areas where not to go, and can even sense other zones of danger, and they keep away," he says.

In the pristine wilderness of a winter's day, walking stick in hand, Čaleta is headed through the forest to inspect a crude hunting cabin and feeding station. It's part of his duty as a government observer during tightly sanctioned bear hunts. The woods smell of fresh pine, and the hike is a chore this smallish man with a weather-worn face seems to relish as he opts for a shortcut

toward the cabin.

According to Čaleta, the bear is a well-traveled woodsman, too, whose constant search for vegetables, fruits, flowers, grasses, meat and water leave him always in peril. "Wherever he can find a beehive or something that attracts him, unfortunately, that brings him into danger from bees and land mines," says Čaleta, noting that beekeepers who

The bear is a well-traveled woodsman whose constant search for fruits, flowers, grasses, meat and water leave him always in peril.

put poison around their hives also pose a threat to the bears, which die from the poison.

However, as the bears wander back into a homeland wracked by war, garbage and traffic are now the biggest problems. Throughout the country it is common to see heaps of trash — including food, chemicals and burned and broken appliances

and furniture — in the forest and by the roadside.

"We have to educate the local people not to dump their rubbish in the forest, and we have to take more control and protection of the garbage dumps that we do have," says Čaleta. "You have items such as detergents and other contaminants that get dumped in the forest that animals eat and are poisoned."

Dr. Djuro Huber, vice president of the International Association for Bear Research and Management in charge of Europe and Asia, has studied brown bears in the region from his base in Croatia for 20 years. Huber, a professor of biology and veterinary science, says the resort areas on Croatia's coast also are a factor in Balkan bear management. When Croatian coastal holiday cottages and hotels leave their trash unprotected, bears have been known to come down from the mountains and stay all night eating trash. Recently, some have even swum to nearby islands and feasted on the sheep that freely graze there. When they become a nuisance or too habituated to humans, Croatian government hunters have had to shoot them.

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Despite the conflicts that inevitably crop up with large predators, Huber believes the Balkan people should want to have bears around. And if they do, the prospects should be bright for bears in both Croatia and in Bosnia and Herzegovina. But, he warns, "It all depends on the attitude of people toward bears and how the bears are managed by the state."

Čaleta emerges from the woods by the hunter's cabin and strolls into a 400-square-meter clearing strewn with cow skulls and bits of corn. Calmly surveying the scene, Čaleta says he hasn't been to this feeding station in a couple months, but he knows immediately that the bears and other predators have been here. Perhaps even his bear.

This winter, Čaleta has been tracking an old war-veteran bruin that a Slovenian hunter has been willing to pay up to \$4,000 to shoot. It is the first bear in the area allowed to be harvested since the postwar hunting ban was lifted last year, and Čaleta, who rarely goes as a guide, wants in.

For the 40-something forester, this is a special case. He will spend, and has spent, many an all-nighter with the Slovenian hunter in a tiny, musty cabin like the one in this clearing, waiting for the hungry old bear to arrive. But he says he may have to wait until March or April when the bear emerges from hibernation to finally catch up with him.

Based on paw prints, Čaleta has calculated this bear to be somewhere between 10 and 12 years old, with 15-centimeter-diameter paws. At perhaps 220 centimeters tall, and 150 centimeters across the chest, he is even bigger than the "golden trophy" bear.

"I am interested in the bear itself, because it was after the war, and it was interesting that a bear that old had survived," Čaleta says, adding that he personally has never





Bosnian forester and bear biologist Marko Čaleta inspects a hunting cabin in the mountains.

shot a bear.

At a primarily mountainous 52,000 square kilometers (about the size of West Virginia), the landscape of Bosnia and Herzegovina is a natural haven for wildlife. And as in most rural landscapes, hunting bears and other animals has always been part of the culture. Marshal Tito, the former Communist dictator of Yugoslavia, had a hunting lodge just up the mountain from Kupres in the central Bosnian town of Bugojno. According to local legend, bears were drugged for his hunting pleasure so he could say he was a good shot.

That isn't too far off from bear hunting in Bosnia today. In much of southeastern Europe, bears are lured by artificial feeding stations and hunted and killed by moonlight as they eat. It is considered an integral part of the bear-management scheme.

According to international bear expert Huber, the advantage of hunting this way is that "hunters are not chasing bears all over the forest. If you did it that way, you

might unknowingly kill a mother bear, thus orphaning her cubs, or possibly only wound a bear, and he'll escape further into the forest." With feeding stations, the government can easily control bear numbers and see that the right bears — predominately old males and injured ones — are harvested.

But why hunt bears at all in Bosnia and Herzegovina when their overall numbers are so low?

The feeding stations are also critical to census efforts. It is estimated that 70 percent of bears in a given area will come to a feeding point at least once, and that is where government experts get their population counts. When bears are at normal levels, as they were before the war, the Bosnian government allows one-third of all bears nation-

wide to be hunted.

Before the war, Bosnian officials permitted a quota of 48 bears per year on average. According to national forestry advisor Sead Hadziabdić, one year bear numbers were so high the forestry department allowed 100 to be hunted. But because bear numbers are now up only about 5 percent over immediate postwar figures, only a few bears have been killed during the normal October-to-May season since the postwar hunting ban was lifted, and none in western Bosnia.

With bear numbers so low, the Bosnian government allows hunters to kill only older bears or bears that have been left with one leg or injured, like from land mines. They do not permit cubs or a female with cubs to be hunted. By law, licensed bear hunters must also be accompanied by a government hunter/ranger. Once the bear hunter and the ranger set a date to hunt the bear, the two will hole up in a lodge near the feeding station on an all-night watch. They sit in silence, no smoking or

other people allowed.

Čaleta enters the hunter's cabin, gazes out the window to the clearing, takes a puff of his cigarette and gestures just how a hunter will "throw the window open, spot the right bear and, *pop!*"

Under perfect conditions there must be a full moon, so catching the right bear can be elusive. "It's a waiting game," Čaleta says and sighs.

But why hunt bears at all when their overall numbers are so low?

"If hunting is kept at low numbers it might be beneficial because it increases the interest for having bears," says Huber. "If bears were fully protected they would promptly be considered a nuisance and killed illegally. Controlled hunting prevents illegal kills, i.e., it's the only effective measure."

As part of the hunt-management strategy, however, Bosnia currently feeds its bears year round, a practice that sets up complications of its own. When the government first

started year-round artificial feeding shortly before the war, they noticed that bear families began to grow. Instead of having just one cub, they were having two or three cubs because they were regularly fed and looked after. During the war, artificial feeding was completely cut off, and Čaleta says that year-round feeding is again necessary for increasing bear numbers.

Čaleta locks up the hut and checks out some fresh wild boar tracks down in the clearing. He makes a mental note to put some more food out. Food means "dead animals found in the forest and any scraps from the slaughterhouses and butchers that the forestry department can get." He boasts that he once took five tons of meat for one bear to a feeding station, and the bear ate it all. He inspects the wires on the ground, which he explains are for securing the meat in place so the animals are forced to eat at the feeding station. Corn is also put out

because sometimes the meat is rotten and bears need to eat the grain along with grasses for digestion.

"Basically you are keeping bear numbers up because many mothers have more cubs, and you are killing the older bears," Čaleta explains. "There's also the problem of the mines. If you don't teach them to go to regular feeding stations, then they'll just go everywhere and go into mine fields and dangerous places."

But Huber, who has spent time studying the bear population in the Bosnian town of Bugojno, says he has seen first-hand the negative consequence of year-round feeding. While he does agree with artificial feeding during hunting season, as Huber explains, bears that eat at feeding stations all year don't have the same range as they normally would. Instead of living their typically solitary lives, they sleep close to the feeding point and are always near other bears. Bears that rank lower on the hierarchy are afraid to



The cabin overlooks a feeding station where a hunter and government observer wait for old males and injured bears.



In the background, at center, foresters inspect a Bosnian bear-feeding station. In the foreground: food.

come to the feeding points in the presence of bigger bears, so they start peeling the bark off nearby trees to get the sweet sap, ruining the forest. Huber worries this could happen throughout Bosnia and Herzegovina if intensive year-round feeding continues. Additionally, animals artificially clustered by feeding tend to be more prone to the spread of disease and parasites, and although older bears hibernate early in winter, younger bears in Bosnia and Herzegovina don't hibernate at all now because there is plenty of grub at the feeding stations.

Huber also worries that there might be a selfish motive in feeding them year round: "To fatten up the bears so they can fetch higher prices from trophy hunters."

The license for hunting the "golden trophy" bear costs about \$4,000, which is for a midsize bear with a 300-point value. Points are carefully determined with a special chart by evaluating the bear once killed. In Croatia, which has a similar system, it costs nearer to \$5,000 to hunt a "gold medal" bear.

Because the average salary in

Bosnia and Herzegovina is only about \$175 a month and unemployment near 50 percent, most people who come here to hunt are from other countries, such as Croatia, Slovenia, Spain and other parts of Europe. However, the money from hunters covers part of the cost of maintaining the bears. The hunters get to keep the skin and the skull,

"The longer we live here, we'll accumulate more livestock," says one villager. "And the only measure we can really take is to kill the bear..."

and the bear meat is eaten and sold. And unlike in North America, where bears and bear parts are illegally determined for their value on the Asian-medicinal black market, there is no known interest or illegal trade in Bosnia and Herzegovina.

Nonetheless, selective hunting and the attendant year-round feed-

ing program remain an imperfect solution in an imperfect land. One problem, says Huber, is that in the past human garbage has been dumped into the feeding stations. If bears get a smell of man, he says, they will start coming into the villages full of "man smells," looking for more food, and that means danger to the refugees.

In order to minimize the threat of problem bears, the Action Plan for the Brown Bear in Europe recommends that Bosnia take the more drastic step of abandoning artificial feeding altogether. The latest Action Plan for the Brown Bear in Europe was presented in Oslo, Norway, last June. It was compiled by the World Wildlife Fund for Nature's Large Carnivore Initiative for Europe, and included experts from several European countries.

Dr. Christopher Servheen, a leading U.S. grizzly researcher, contributed to and endorsed the Action Plan, including the abatement of Bosnia's feeding program. But Servheen cautions that once this practice is started, it is hard to stop.

"In most areas, it is important

that feeding continue as many bears are now dependent on such feeding sites, and if the feeding was stopped these bears may seek food in villages and farms," Servheen says. Ultimately, it's up to the government, and currently there does not appear to be any movement by Bosnia and Herzegovina toward doing away with the system.

Federal forestry advisor Sead Hadžabić says Bosnia would like to work more closely with specialists from other countries to improve its bear-management strategy. He is also interested in moving some bears from mined areas into non-mined areas, and in planting more trees to enrich their food supply. However, as the country is gradually renewed, Hadžabić admits that implementing bear-conservation programs is not a government priority.

"The government doesn't even have the money for human refugees to come home," he says, "let alone the bears."

Nonetheless, the people and bears are returning home, sometimes side by side. How well they will coexist after an event so catastrophic as war is still anyone's guess.

"It's okay now, before they get a taste of meat," says villager Mirko Kanlić as he squints at the pastoral landscape below his temporary shelter and dreams of tending sheep again. "They won't take humans, but if they get a taste of meat, live meat ... if they get a sniff of that, then they will be unbearable. Otherwise, while the bears are eating the fruit, it doesn't bother us as much."

Kanlić reaches into the cupboard for some of his prized slivovitz, a plum brandy moonshine made from the few fruit trees the bears haven't pilfered. The drink is a village specialty.

"Bears make too many problems for us, cause too much damage," he says, recalling the time before war. "We would try to seek compensation



Widespread garbage dumping poses a threat of contaminants to bears.

from the state. The problem was the state was very unwilling to compensate for any damage the bear would do. The longer we live here, we'll accumulate more livestock, and the only measure we can really take is to kill the bear, but the problem is that if the state finds out you've killed a bear, then that would cause more problems than it really solves."

The fine for illegally shooting a bear in Bosnia and Herzegovina is the value of the bear multiplied by 300, plus confiscation of your weapon and any hunting licenses you might have. The average bear is valued at about 7,000 DM, or about \$3,500 dollars.

Playing the good host, Kanlić pours his guests a shot from an aged batch of slivovitz. At 10 a.m. it's a hearty defense against just about anything, and, warming to the conversation, Kanlić admits that at least the bear is more "polite" than many other wild animals. He notes that a bear will typically steal only one ani-

mal at a time, drag it 400 meters, eat it, then bury it, whereas a wolf will ravage as many sheep as possible without even eating them.

Marko Čaleta, a Bosnian Croat also native to this land, is sympathetic to the village people. Like the bears, they have been a part of this forest all their lives. "They have a vastly different experience with the bears than forestry observers or hunters," he says, "because they actually see them face to face in the wild."

And ultimately, both the villagers and the bears were driven from their homes, and they both came back. For Kanlić, it seems there is something to respect about that.

The old villager pauses again to gather his thoughts, and then lifts his glass. "Izvoli!" he says, inviting us to "have some!"

He smiles, and raises a toast: "Za Medved!"

To the bear! 🐻