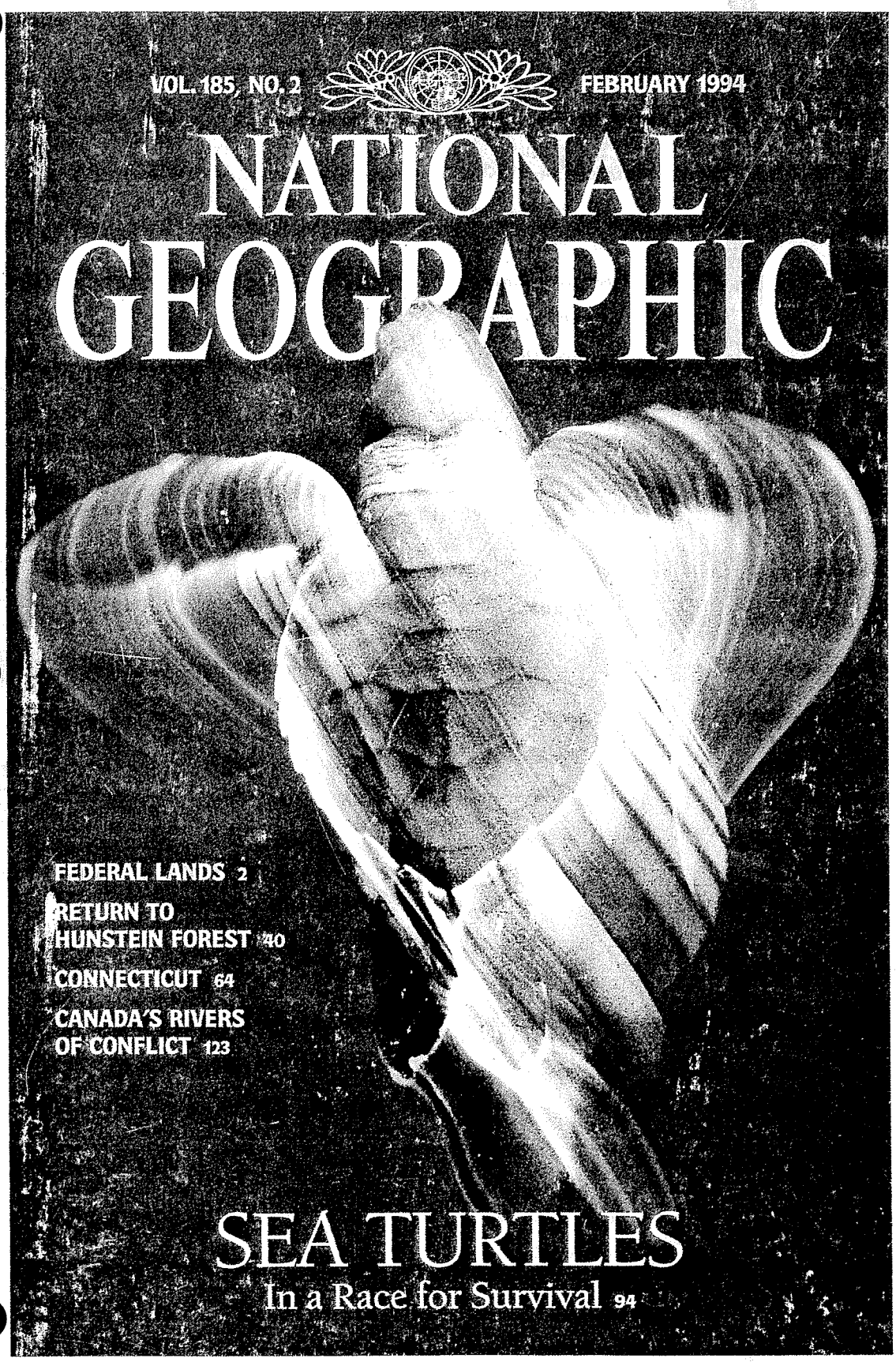
Appendix 1:

Excerpt from *National Geographic*, February 1994, pp. 24-25. Conditions in Bucktail Creek before remedial "early actions" and before a stand-replacing forest fire that burned through the drainage in September 2000, changing its appearance.

DOUBLE MAP SUPPLEMENT: THE WORLD



SEE "REFLECTIONS ON ELEPHANTS" WEDNESDAY, FEBRUARY 9, ON PBS TV

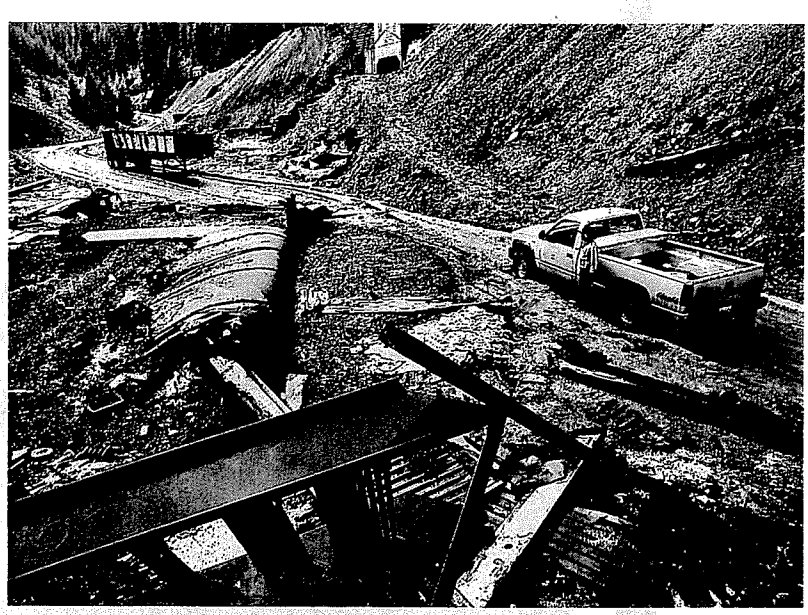
proceeds from the auction reached $215,000.

I had this uneasy feeling, finally, that a rancher named Bruce Mulkey might be right when he said that environmentalists working to push traditional users off federal lands were making the countryside safe for ranchettes and subdivisions. For me, there is something endlessly forlorn about a place like Elk Bend, south of Salmon, where a California developer sliced an oxbow floodplain into narrow lots for double-wide retirement homes. I hardly ever saw anybody outdoors among the neat post-and-pole fences there. Salmon had not welcomed them.

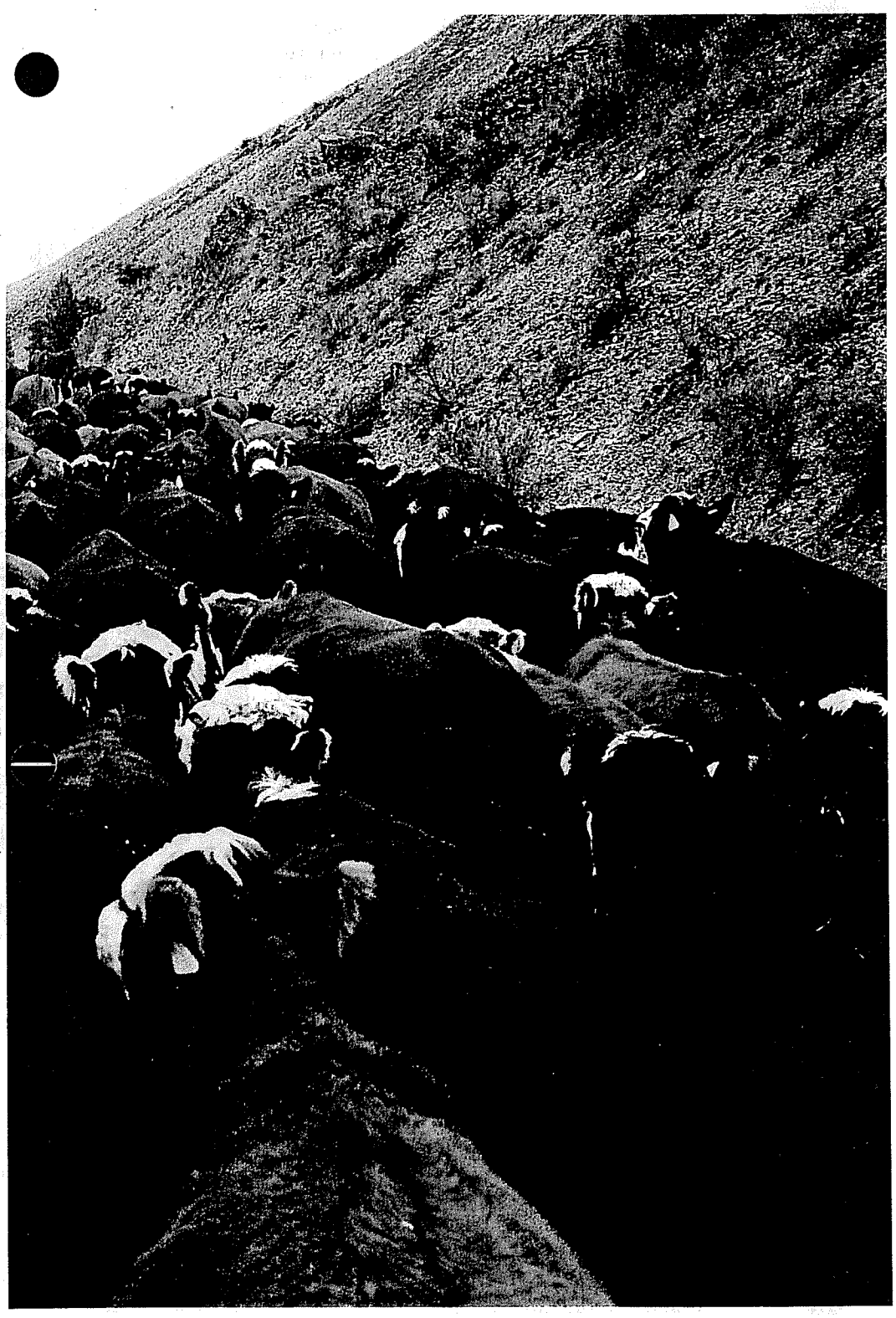
"They retire from California, they last about three years, and then their bodies get shipped home," a local told me. Meanwhile, the television sets were turned on inside, and the rooftop satellite dishes seemed to be reaching out to geostationary orbit for reruns of *Bonanza*.

UP IN THE SALMON NATIONAL FOREST one dawn an 18-year-old named Shaun Westfall directed his scarred D-6 Cat up a ragged dirt slope. I hung on to one side, and a tree feller in hobnailed boots perched on the other. Downed logs and debris underfoot sent the Cat clanking and swiveting from side to side. It was steep enough that I wondered which way to leap if the Cat rolled.

"You usually get a scare about once a day," said Shaun, a college student who was



A black eye on Idaho, the Blackbird copper and cobalt mine in Salmon National Forest has been targeted as a potential cleanup job for the EPA. Unprofitable since the late 1960s, the mine site remained a tangle of debris until last year. Heavy metals continue to taint nearby Bucktail Creek.



A river of cattle flows down from the Continental Divide, where the herd had grazed on public lands all summer, to the Lemhi Valley, where it will feed on hay until the following spring. In Idaho, cattle ranching is a 700-million-dollar industry.

the Forest Service had allowed Champion International and other, smaller companies to log most of the best timber in the 1960s and '70s. Valuable ponderosa pine and Douglas fir were stripped from the most accessible slopes. The wilderness and roadless areas had survived only because they were too steep, too thinly forested, or too remote to be worth harvesting. Burns said, "It's a good thing there was a lot less viable country, or no doubt it would all be cut by now."

That is how the federal government has managed its lands all around the West. Forest Service supervisors themselves have complained that in the 1980s politicians pressured them to cut as many trees as they could. The federal-land managers typically knuckled under. They increased the cut in places like coastal Oregon, even when their own staff scientists were telling them that a more gradual harvest was the only way to sustain natural resources like the spotted owl.

The ostensible aim was to generate jobs for constituents, but it didn't work. In Oregon and Washington in the 1980s the allowable cut reached its highest level—and 25,000 timber jobs disappeared because of automation and log exports. When the old-growth trees were mostly gone as well, the government clamped down. Now at least 10,000 Pacific coast jobs are vanishing to protect the northern spotted owl under the Endangered Species Act. In effect, the government had pitted loggers against environmentalists by its play-it-out, lock-it-up brand of land management.

Automation has arrived in Salmon too. At one site, I watched a heavy machine called a feller-buncher nipping off trees and delicately stacking them at a rate of a thousand a day—three times what Westfall's tree feller can manage. Workers displaced from other regions are also coming to Salmon. Out-of-state loggers kept the local budget motel full all summer, but only about half the timber sales wound up at the local mill.

On a walk through what he called the "trailing edge" technology of the mill, Dallas Olson, a part owner, talked about becoming more efficient: Chips get sold to make paper and shavings to make particleboard. "That's what the whole game is about," he said. "You got to get more out of what they give you." He argued for cutting more trees. But he also worried that sometime soon the national forest might not give him any wood at all.

WHEN ENVIRONMENTALISTS want to show you what's wrong with the way federal agencies have managed public lands, they often start at a mine. You could go, for example, to Bear Valley Creek east of Boise, which used to be one of the premier chinook spawning areas in the Northwest. Then, in the 1950s, a company launched a dredge-mining operation at the behest of the Atomic Energy Commission. Promising to keep the creek "crystal clear," it went on to extract a million pounds of rare earth minerals and uranium used in defense manufacturing. Under the Mining Law of