politicians to abuse the system has been difficult to resist. In one celebrated case, British Columbia Forests Products ended up owning a tree farm licence by bypassing the chief forester and taking its case directly to the Forests Minister. In 1958 the Minister was imprisoned for received "considerations", but the licence was not revoked - the judge ruled the company had obtained its TFL in an honest fashion. Today the licence has been amalgamated with another to make up an area of 181,000 ha, called TFL 46. It is now owned by Fletcher Challenge.

But it is not only the way in which logging licences are given out that has come under fire; logging practices themselves are a bone of contention. Logging companies are plainly embarrassed about clearfelling - but not so much what it might be doing for the biodiver-



Bonny Glambeck: imprisoned for refusing to pay her fine following anti-logging road protests.

sity of the forests. No, clearfelling looks bad, and the practice has become a public relations problem.

In many logging areas riparian strips do not exist. Before logging, all streams are rated for their natural values, with an emphasis on their value as salmon spawning grounds. In some cases riparian strips are left downstream. However, little attention is paid to the effect of silt from totally denuded upstream areas, on the areas downstream.

FCC counters that the Department of Fisheries and Oceans and the Ministry for the Environment (Wildlife Branch) together review and approve all company logging plans and monitor operations to ensure compliance. Furthermore, the company raises five species of salmon and releases millions of fry into waterways each year. Salmon are under a four-fold pressure: habitat destruction, overfishing (particularly driftnetting), ocean warming (believed to be making the sea increasingly uninhabitable for them), and pulp



Project Phoenix in the Carmanah Valley underway with volunteers restoring the boardwalk earlier destroyed by vandals. Photo: Gerard Hutching

mill pollution. It has been estimated that salmon numbers are a half of what they were at the turn of the century. Yet even now no detailed studies have been carried out.

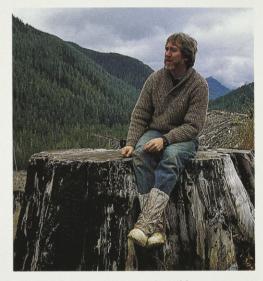
Laments FOCS director Bonny Glambeck: "Virtually no wildlife studies have been done. We don't know what we are destroying."

And with the salmon in decline, what future for the grizzly bears (found only on the mainland) or for the orcas that depend on a continuing supply of the fish? Each summer

around 270 orcas ply the waters around Vancouver Island, feeding on salmon. In winter they disappear out to sea.

One of the most intriguing Canadian wildlife stories is that of the seabird the marbled murrelet, and its dependence on old growth forests. The secretive murrelet makes its nest atop the huge branches of the old trees. By 1990 only 11 tree nests of this fascinating bird had been recorded; no-one knows just how many birds may have been affected by logging, but it is believed that they may seek out the same tree for nesting year after year, in the same way other seabirds return to the same burrows. The loss of the forests is diminishing the chances of the bird's survival. In 1990 it was added to the list of Canada's threatened species.

According to Fletcher Challenge Canada,



Joe Foy of the Western Canada Wilderness Committee: "I want to know we will have ancient forests forever." Photo: Gerard Hutching

there is no evidence to show the marbled murrelet returns to the same tree. It says that the bird's population is an estimated 45,000 in B.C., and numbers are stable.

Don McMullan is unrepentant about FCC's logging methods. He says that in the past the company left some riparian strips in upstream areas but high winds blew the trees down. But, bowing to concern over salmon decline, forestry practices are changing to reinstate riparian strips alongside all rivers.

He is also annoyed about the "Brazil of the north" epithet applied to B.C. Certainly the scale of clearance is less: the 260,000 ha logged a year in B.C. compares with the 1987 clearance of 2.1 million ha of Brazilian rainforest, much of it by fire. Since then the rate of clearance in Brazil has dropped.

According to McMullan, forestry practices in Canada are equal to the best elsewhere in the world. After all, the companies now re-

plant logged areas, he says.

It is on this point that conservationists and foresters part company. Conservationists say that tearing down 500-year-old forests and replacing them with two or more species which will be logged in 60-80 year's time is not the way to manage them. They say logging should mimic natural processes, biodiversity reserves need to be created and there should be multi-species natural regeneration.

Supposedly overseeing the way in which forests are managed is the B.C. Forest Service, but the grossly understaffed department has

## Saving the Stein

N 1989 native Indian chiefs Ruby Dunstan and Leonard Andrew travelled to New Zealand to plead with Fletcher Challenge Ltd directors and shareholders that they should not log their band's spiritual homeland, the Stein River valley.

A source of controversy since the early 1970s, the Stein Valley is, at 106,000 ha, the largest intact major catchment left in south-western British Columbia.

Bowing to pressure to protect the valley, the provincial government designated two wilderness areas within the watershed - one protects the glaciercovered Coast Range peaks and alpine tundra at the headwaters of the river.

The other safeguards the lower Stein as it descends eastward into the arid rainshadow of the Fraser River canyon. But lush forests at the heart of the valley, which Fletcher Challenge want to log, have been left unprotected.

At present the government has placed a moratorium over the logging; meanwhile says Ruby Dunstan: "The spiritual and physical footprints of our ancestors are evident for all to see throughout the Stein Valley which is like the pages of a book upon which thousands of years of our history are written....Fletcher Challenge must accept the lion's share of responsibility for a just resolution of this conflict."