## SCIENCE

## Japan's bears barely hanging on

By RAN LEVY

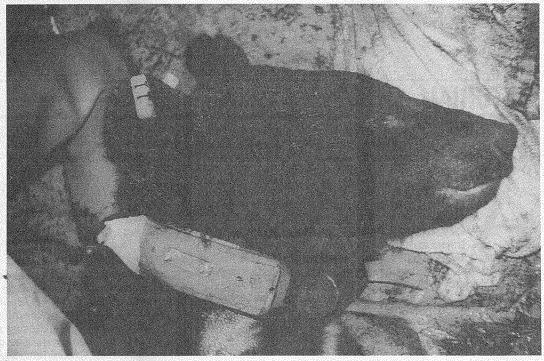
The bear is a paradox.

It suffers from a number of conflicting images, from the cute, cuddly children's plaything and hero of numerous childhood tales, to the dangerous beast, the terror of the forest.

In traditional Oriental medicine the bear possesses great value. One source even describes the bear as a "mobile pharmacy" since it produces a wide range of "products" believed to cure a long list of ailments and pains.

The Japanese black bear (Selenarctos thibetanus japonicus) is a subspecies of its continental Asian relative. It is a relatively small bear (adult females weigh 40-100 kg and males 60-120 kg), black, with a crescent-shaped white collar. Despite its short legs and thick layers of fat and fur, the bear can move surprisingly quickly. In general, bears are not dangerous to men, and when encountered are more likely to try to escape than attack, unless taken by surprise at close quarters or when nursing

About 10,000 black bears are estimated to inhabit Japan's ancient buna (beech) forests, from sea level up to the alpine zone in Honshu,



JAPAN'S BLACK BEAR is small, quick-moving — and in danger. The replacement of the bear's beech forest habitat with monoculture cedar plantations and relentless poaching for its use in Oriental medicines has drastically reduced numbers. PHOTO BY RANLEVY

Shikoku and Kyushu. The bears prefer steep mountain slopes where they feed on various plants, berries, acorns, young buds and the like. Insects, crabs, small animals and carrion are also welcome additions to their diet.

Bears are good climbers, and make nests from broken branches, except during the winter months (November to April), when they use hollow trees or rock caves for their dens

Beech woods dominated most of the Japanese archipelago before the almost sterile, monoculture cedar plantations of present. The continuous decline of the beech trees, along with an increase in hunting activity has caused a rapid shrinking in bear populations. No longer able to find sufficient food, bears are often forced to forage in neighboring farms, where they damage crops, beehives and storehouses.

The situation is especially aggravated in autumn, when hungry bears move through the beech woods in search of energy-rich acorns, chestnuts and other fruits, essential for the long winter's sleep. Out of their usual territory, the bears are nervous and insecure, and may react aggressively. They are also at the mercy of local hunters.

At present more than 2,000 bears are being killed each year, not including "pests"

Moreover, this is the time when the bear's gallbladder, the most valuable part for traditional medicine, is at its largest.

Despite repeated efforts by researchers and activists to alert the authorities to the bears' present dire situation, Environmental Agency policy has not changed.

In fact, the situation seems even more severe considering that the overall population estimate of 10,000 is highly suspect. Estimates are supplied by prefectural governments, which often appoint local hunters' clubs to count bears — similar to letting the fox guard the chickens.

No great mathematical skill is needed to see what is in store for the bears if the present policy is not changed. Even if the unlikely official estimate is correct, at a rate of over 2,000 kills per year the bears will last only another five years.

A general solution would be for the Environmental Agency to impose a general plan for nature and wildlife management, beginning with an