

SAVE

UPPER CARMANAH VALLEY

Home of the world's first temperate rainforest canopy research station



"If we build it, the scientists will come!"

Paul George of the Wilderness Committee explains: "We had this idea that if we built a boardwalk into the upper valley, provided basic accommodations, and built some tree platforms, scientists from around the world would come here and carry out research in this ancient temperate rainforest watershed. And you know something? We were right."

The entomologists from the University of Victoria were the first to sign on. "We knew we were getting our feet wet in the political arena when we agreed to get involved in the canopy research program," says Richard

Ring, University of Victoria's one-man entomology faculty and immediate past president of the Entomological Society of Canada. [The canopy facility is located in a Provincial Forest under Tree Farm License tenure to MacMillan Bloedel Limited and is still scheduled for clearcut logging.] "But it was just too good an offer to pass up."

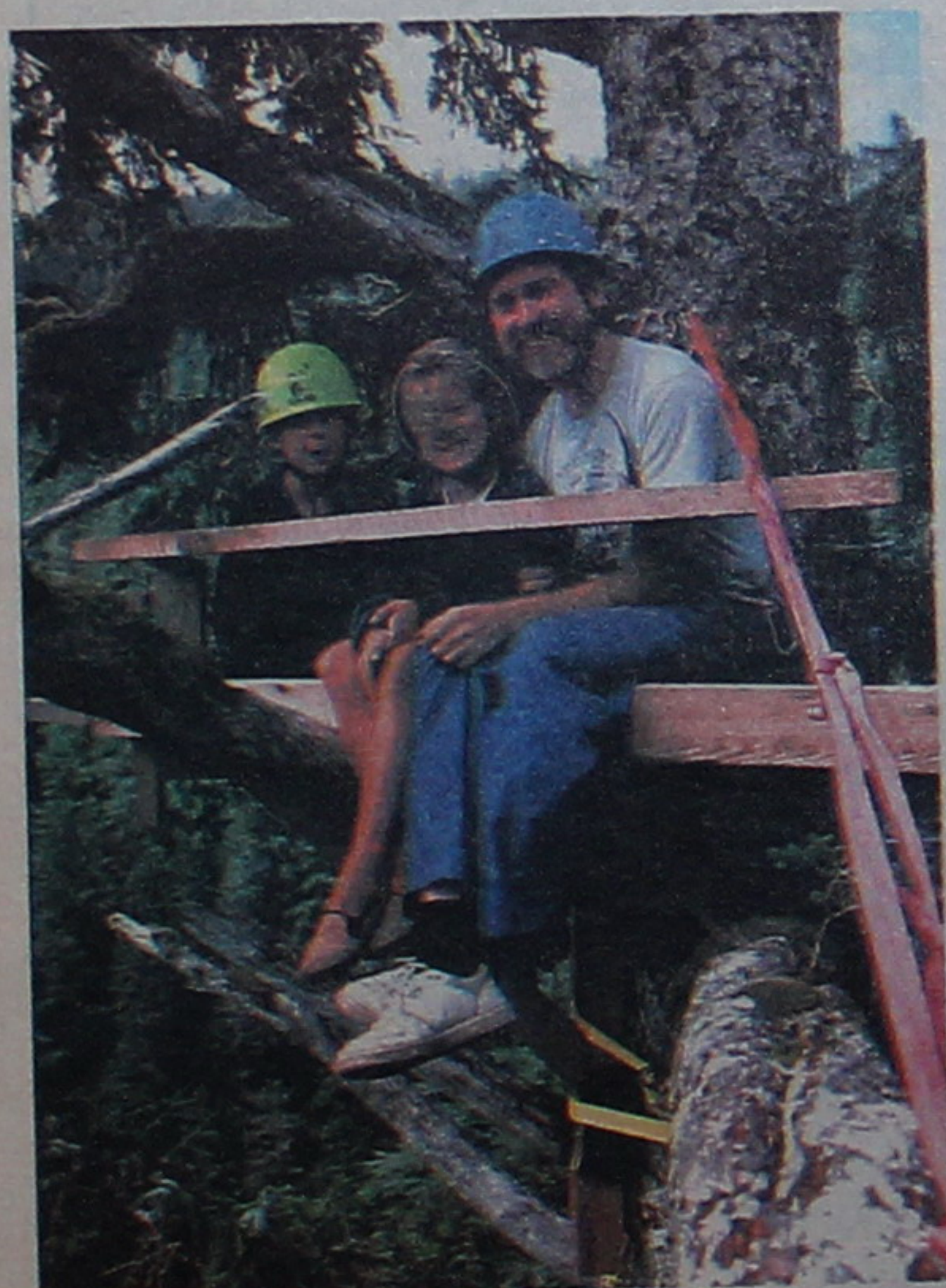
Continues Ring: "The research platforms in the Upper Carmanah provide a unique opportunity for science. A systematic study in the canopy of a temperate rainforest has never been done before. In Europe,

entomologists would give their right arm for an opportunity to work in a situation such as this."

UVic entomology lab instructor and PhD candidate Neville Winchester designed the overall canopy research project, devising an elaborate sampling program that compares the insect/arthropod life in the canopy of the five Sitka spruce trees with that found on the forest floor and in the neighbouring clearcuts.

Following quickly on the heels of Ring and Winchester was UVic seabird biologist Alan Burger, who, at the request of UVic

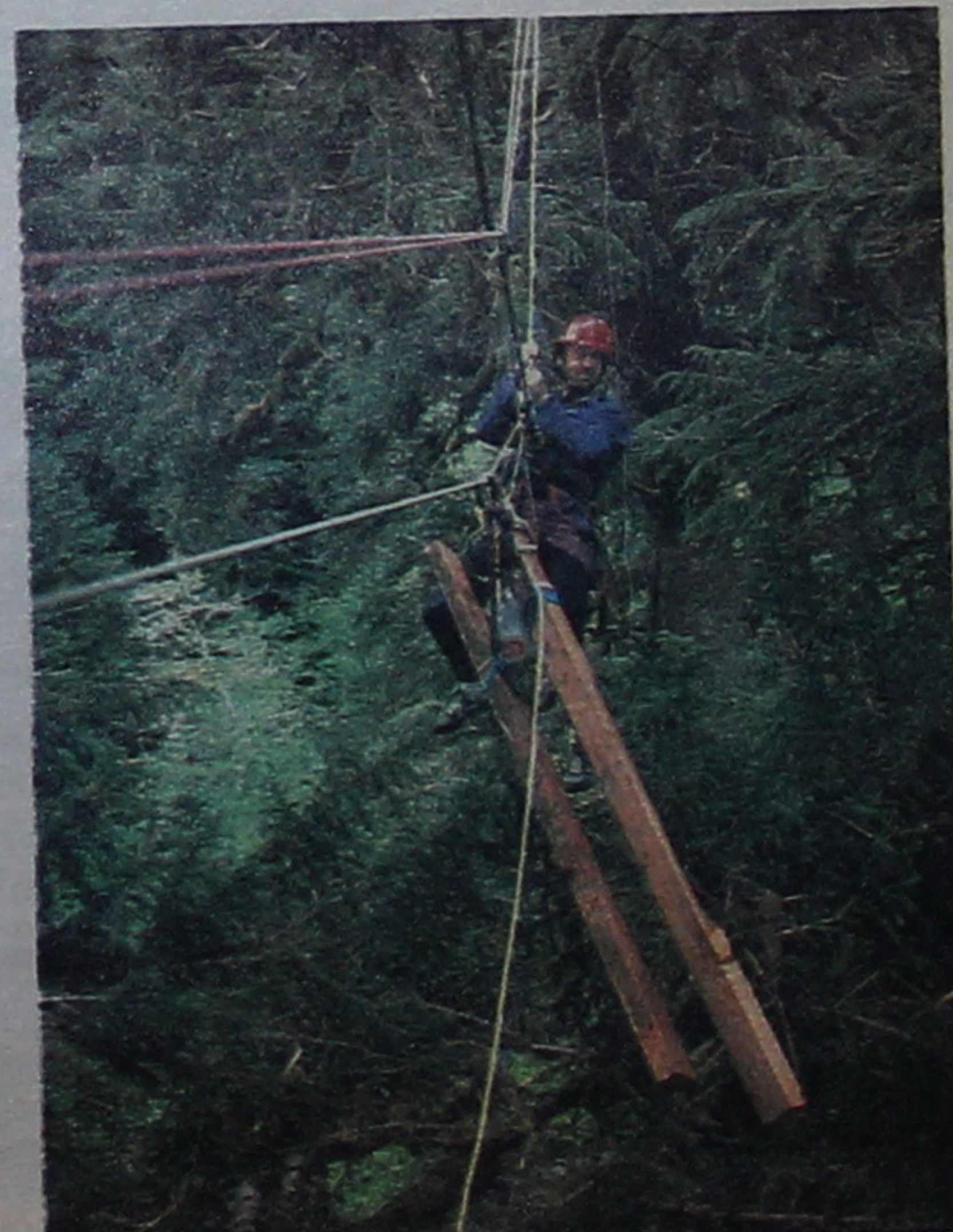
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Joe Foy with his kids on top platform



Construction detail of removable braces



Moving wood for platform in adjacent tree

The sky-scraping rainforest

The canopy is a forest's first point of contact with the sky. A never ending but always changing stream of sunlight, wind, and precipitation washes across the tree tops, triggering a barrage of life-sustaining chemical reactions that reverberate from the crowns of the trees down to the tips of the roots. Above all, sunlight energy is captured, carbon dioxide molecules are coupled together, oxygen and water are released, and life goes on.

Like other contact points in nature, such as the nutrient-rich estuaries of rivers, the forest canopy is an ecologically dynamic world, a crucible of life. "Using one conservative estimate," says Dr. Ring, head of University of Victoria's Entomology Department, "we expect to find about 2000 species of insects and arthropods in the old-growth tree canopy in Carmanah Valley. Many of these will be new species, never before described."

For Richard Ring and Neville Winchester, scaling the heights of the Carmanah rainforest is a little bit like Darwin surveying the mysteries of the Galapagos. In the forest canopy they have come face to face with a busy, complex and entirely foreign web of life that no one even imagined existed, let alone studied. This is a world of beetles, butterflies, moths, bees, ants, flies, mites and collembola (pencil-point-sized "springtails") that thrive in the mats of the rich green moss that cover the branches of the old-growth canopy. It is also a world populated with mysterious lichens, a world draped with unknown epiphytes.

"Scientists talk a lot these days about the pyramid of life," says Ring. "The top of the pyramid is where you find the high profile lifeforms -- the bears and the eagles."

"But more and more we are looking at the base of the pyramid, which is where you find the building blocks of life -- the countless micro-organisms."

"The next level up from the micro-organisms is that of the insects, and all the other non-vertebrate species. That's the level of life we are studying in the Upper Carmanah. And it is fundamental to gaining a basic understanding of the ecology of the temperate rainforest."

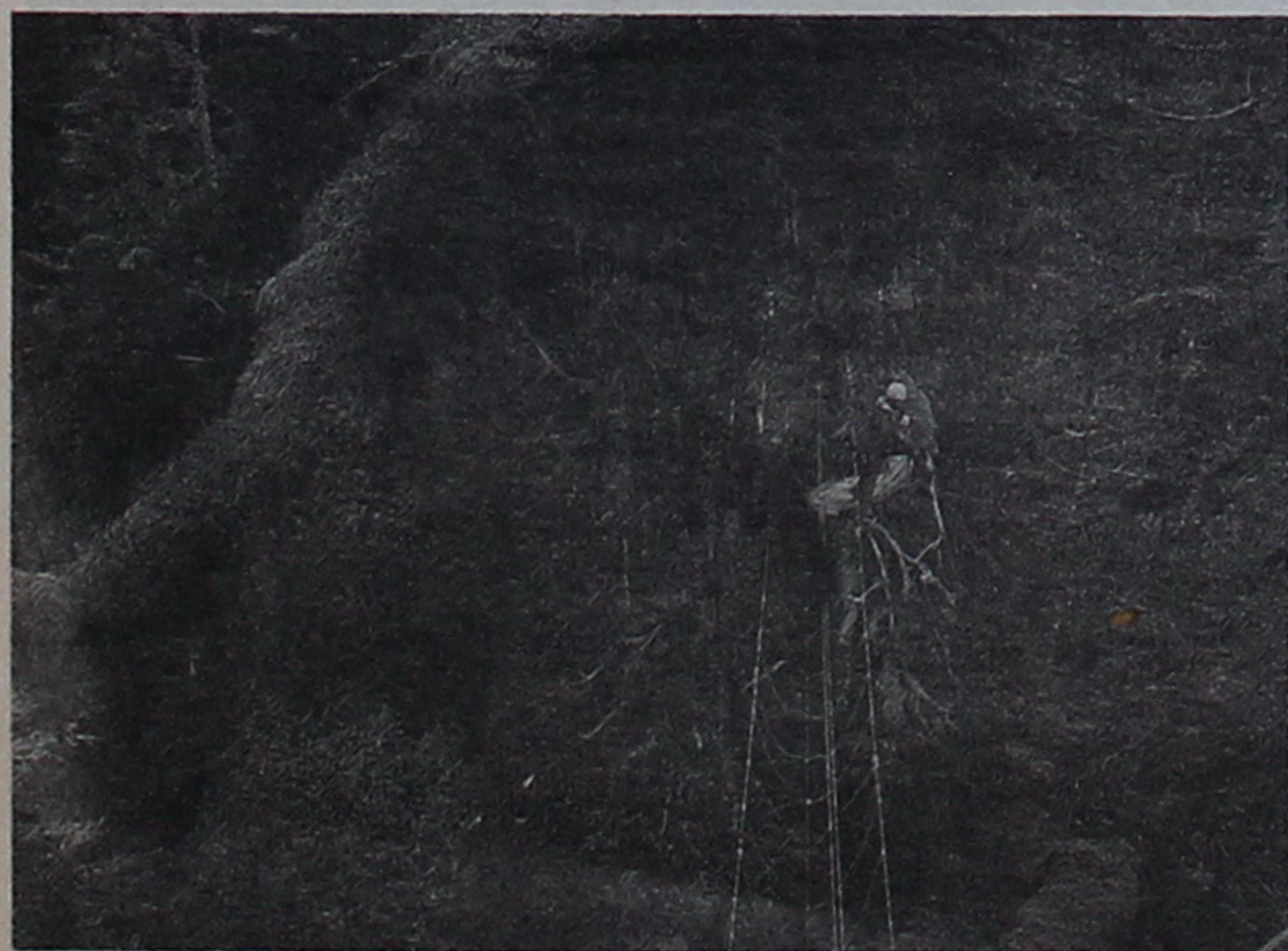
B.C. government refuses to provide more secure tenure for Upper Carmanah research station.

In January 1993, Paul George, WCWC founder and executive director in charge of research and publications, asked B.C. Forest Minister Dan Miller to convert the Wilderness Committee's year-to-year renewable Special Use Permit for its Upper Carmanah Valley Research Station to a five-year renewable term. Such added security of tenure for the station would give the scientists using it some greater assurance that research projects which take several years to complete would not come to a premature end due to clearcutting of their research sites.

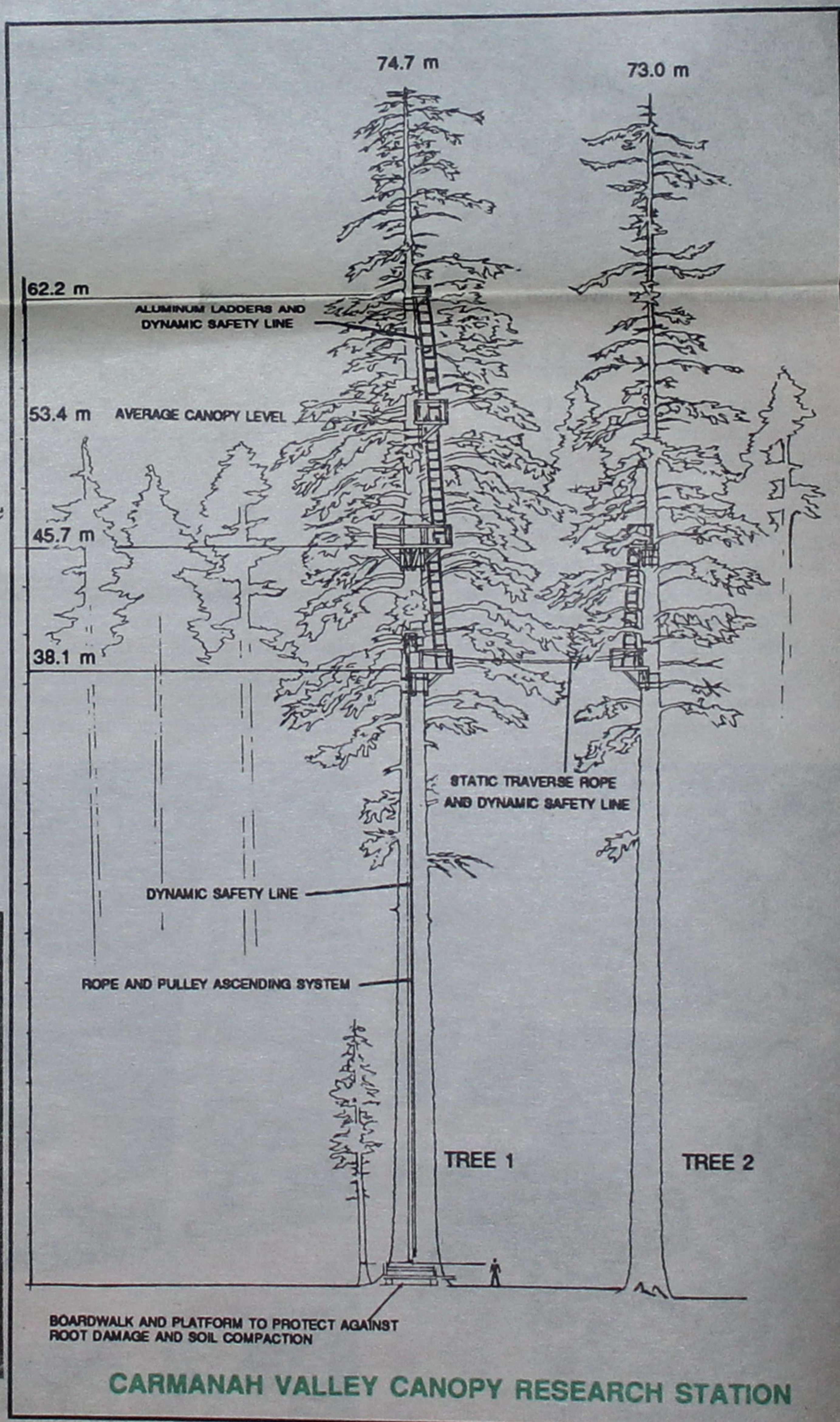
Forest Minister Dan Miller's answer was "no". Without more public pressure on the government and the Commission on Resources and Environment (CORE), which is currently working on recommendations for further park protection for all of Vancouver Island except Clayoquot Sound, the Upper Carmanah could be lost.



View of the forest canopy from canopy platform



Researcher gathering insect samples



THE UPPER CARMANAH RESEARCH STATION

Dismissed by a former B.C. forest minister as "tree houses", the wooden platforms that are strapped (not nailed) into the canopies of five Sitka Spruce trees in the Upper Carmanah are serious research installations--the first of their kind in North America. Common in tropical rainforest research for many years, in 1989 fixed research platforms in northern temperate forests were a brand new concept.

The brain wave for constructing the platforms was Shane Kennedy's. Now a Vancouver publisher and film maker, Kennedy spent nearly 15 years in many of the world's tropical rainforests helping to establish remote scientific research stations.

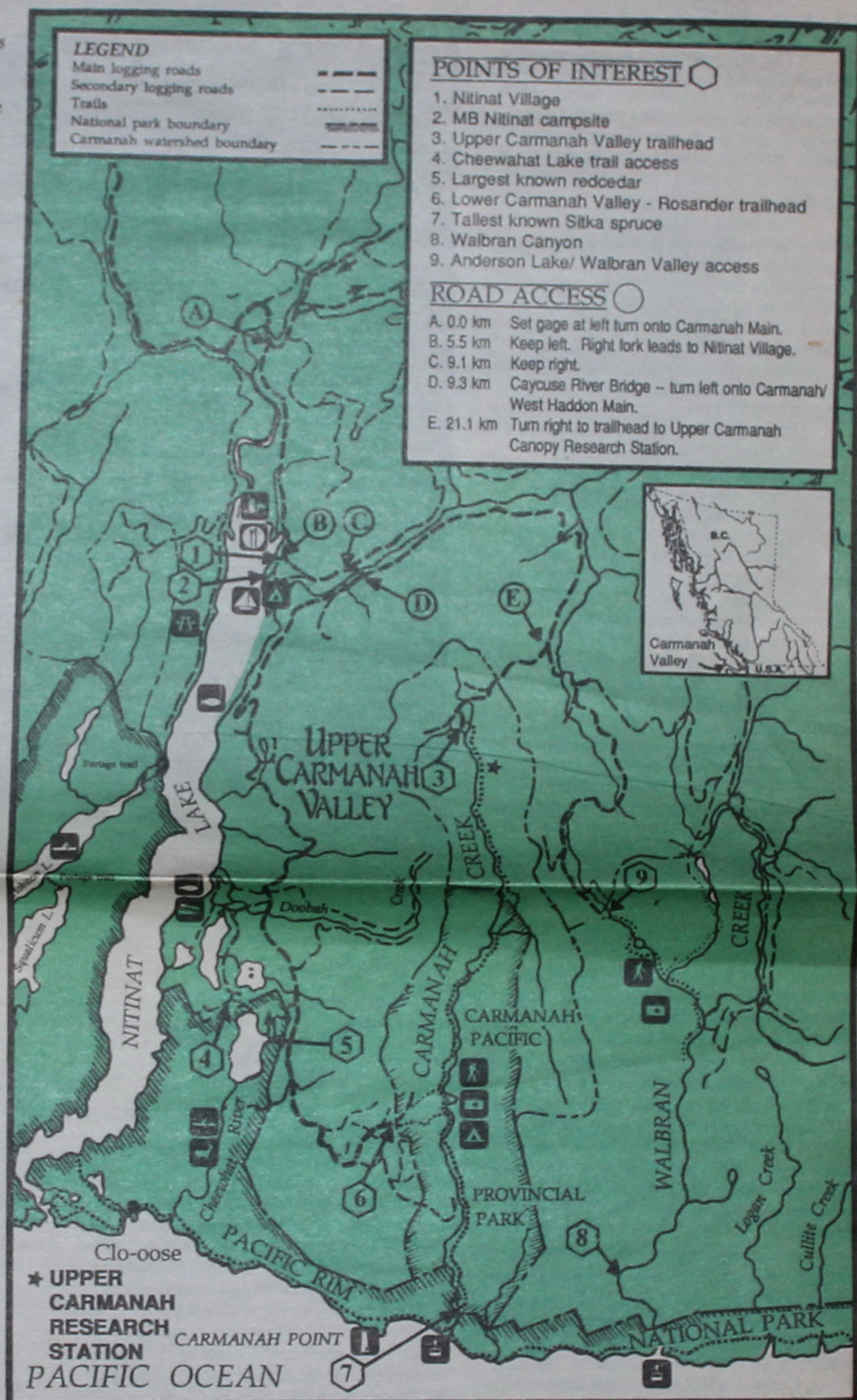
He proposed that the Wilderness Committee erect similar platforms in the Upper Carmanah. It was just when the fight to save the 6700-hectare Carmanah Valley and the spectacular Sitka spruce trees there--including the tallest known living tree in all of Canada (95 metres or 312 feet)--was at its peak.

Under Kennedy's guidance, a volunteer crew from the Committee pre-built the first platforms in Vancouver, then loaded them onto the back of a pick-up, ferried them across the Strait of Georgia to Vancouver Island, and hauled them along a series of logging roads in the dead of night in the middle of winter to the headwaters of the Carmanah. A boardwalk and rustic base camp were banged into place and the first platform was strapped into a tall Sitka spruce.

"There I was dangling from a rope 160 feet in the air in the pouring rain on a cold day in March," remembers Joe Foy from the Wilderness Committee, "trying to cinch a series of four-foot long right-angle braces to the ancient Sitka spruce with canvas truck straps. I might as well have been trying to hang giant Christmas tree ornaments. It was wild."

From these daring beginnings emerged four more canopy platforms, a series of swaying Burma bridges that link the various platforms at various heights--the highest slightly over 60 metres (200 feet) off the ground--and the launch of research undertakings which are proving to be of major international significance.

The Wilderness Committee has begun construction on a comparable structure in a grove of Cedars in the nearby Walbran Valley and is planning to construct one in a grove of ancient white spruce along the Peace River in the boreal forest in Alberta. Already traps placed by Alberta WCWC research team indicates that many new insect species will be found here too, indicating the biodiversity and complexity of this ecosystem is much greater than previously thought.



Ladder leading to higher platform in main research Sitka



Information booth at research base in Upper Carmanah

"A NEW SPECIES EVERY DAY"

The total number of insects that have flown or crawled into Neville's traps in the canopy of five Sitka spruce trees and surrounding old-growth forest in the Upper Carmanah over the past three years probably exceeds 750,000. Winchester's modest lab at University of Victoria is filled to the ceiling with them.

Not being an expert at classifying insect species (he's an ecologist, not a taxonomist), Neville has sent select samples, about 25,000 specimens in total, from his collection to 62 insect identification experts around the world. These taxonomists are comparing each "bug" with existing collections, separating the already known (previously identified and named species) from the new ones. It is slow going.

People skilled in classifying lifeforms are a dying breed. In Canada the federal government no longer trains taxonomists. But without their unique skills, the work that Neville does would not be possible. No one could tell him precisely what he had found. To even get in a position to start to understand ecosystems we need more taxonomists to do the identifications of the millions of new insects being found around the world.

The preliminary reports Neville is getting back from his 62 experts, who work on a volunteer basis, are startling; it seems that nearly every day he receives word of yet another new species.

And just how many new lifeforms has he uncovered so far? Neville is reluctant to say, because he is more interested in understanding ecosystem processes, rather than just counting up new insect finds. And he points out that it is just as significant to identify rare species as it is to tally up new species. Because both new and rare species will be lost if the ancient forest habitat is clearcut.

Nonetheless, when Neville finally sat down and reviewed his data, even he was amazed at the volume, variety and unique nature of what already has been identified. His team of experts has tentatively sorted out at least 60 new species of insects, while many more than that simply are unclassified because so little is known about them. Clearly, Neville's "official" estimate that he will find 200 new species in total is much too low.

What follows is a progress report summarizing the insect findings to date from the Upper Carmanah. In every case, the numbers are approximate, subject to further analysis.

It must be remembered that Neville has only identified a very small percentage of his entire collection. And 17 of the 32 orders of lifeforms he has found in the Carmanah have not yet been examined by experts. (The classification sequence is Kingdom, Phylum, Class, Order, Family, Genus and Species).

The following is a progress report summarizing the insect findings to date from the Upper Carmanah. All numbers are approximate, subject to change as more information is gathered.

Orders



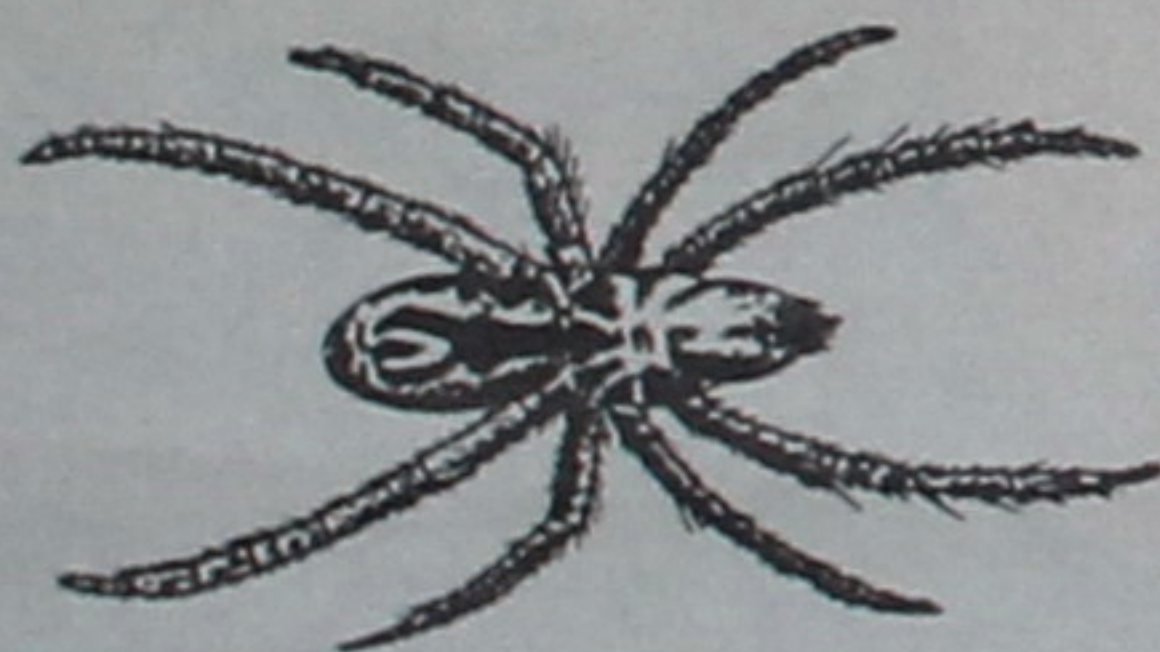
1. Mites (Acari -Oribatida)

In this one sub-order, Neville's study has identified 1008 specimens from more than 50,000 collected. Of a total of 26 families and 59 species of mites catalogued, he has



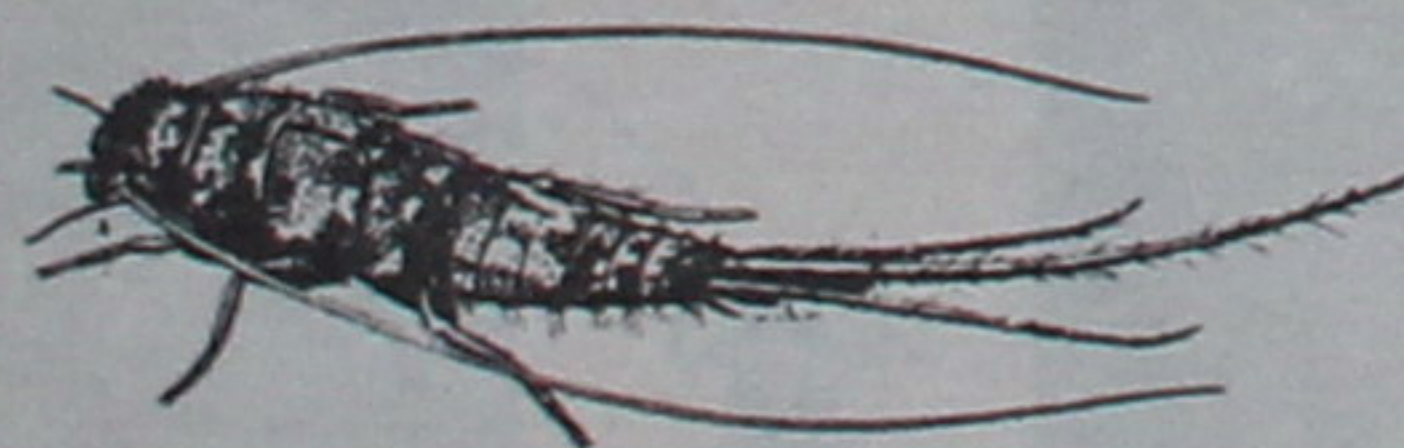
Ecologist Neville Winchester collecting insects in moss pads in canopy research tree

discovered one new genus and 26 new species. Neville won't project the total number of new species he might eventually identify, but it could top 100.



2. Spiders (Araneae)

Spiders are a well-studied insect, so Neville doubts he will uncover a new species in the Carmanah study. But he has found a variety of ground-dwelling tarantula never before seen in Canada, and he feels it is clearly dependent on the old-growth ecosystems. Seven other species of spiders have only been documented in the forest canopy. Half of Neville's spider collection has been examined so far, revealing 17 families and 52 species.



3. Springtails (Collembola)

These are tiny, soil-moss-dwelling insects that inhabit select microhabitats in the forest ecosystem. With only two percent of the collection examined, Neville's study has identified nine families and 42 species. This includes one new genus and 12 new species. As with the mites, there are scores of new genera and species still to be identified.



4. Beetles (Coleoptera)

With about one-third of his Carmanah beetle collection identified, 17 families of beetles and 98 species have been recorded. Seven of these species are new, including three in one family (Staphylinidae). Several new species are numerically dominant among the insects in the tree tops, suggesting that they play an important function in canopy ecosystems.



5. Flies (Diptera)

Neville may have collected as many as 500,000 specimens of flies. Only two per cent of these have been examined, but he has already found a new genus and 14 new species. Even more significant is the wide variety of fly species he has found. For example, within just one family of fungus gnats (Mycetophilidae), experts already have identified 217 known species. The total volume and variety of flies left to identify is staggering.



6. Wasps/bees/ants (Hymenoptera)

While the ancient temperate rainforest

is filled with insects from this order, Neville has very little solid information to report. Only one percent of the collection has been studied, producing 15 families and 94 species. But 85 of those species can't be positively identified. This is uncharted territory.



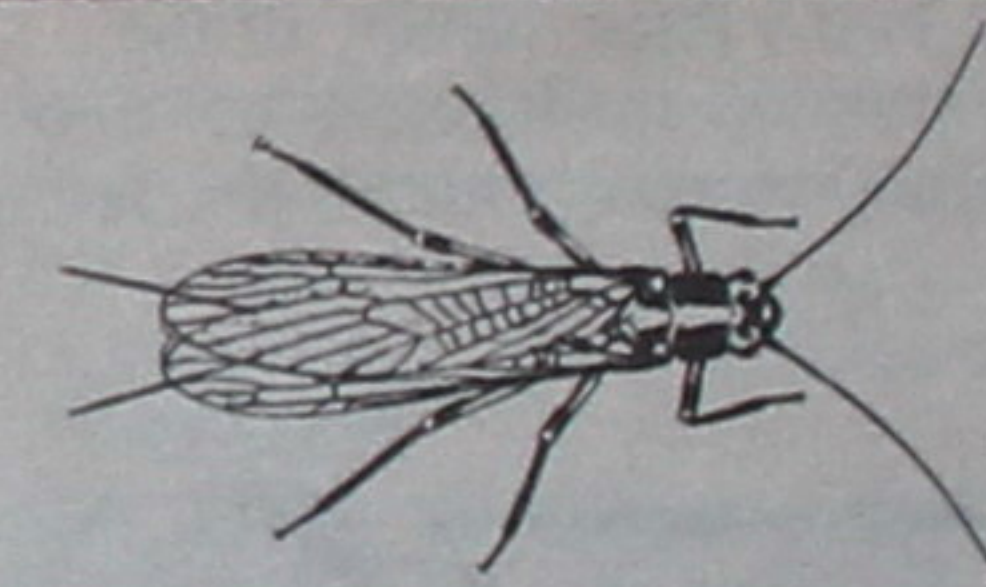
7. Butterflies/moths (Lepidoptera)

Collected from branch clippings in the tree tops, the samples of butterflies and moths Neville assembled are mainly canopy dwellers. Like spiders, this class of insects is well studied, and Neville found no new lifeforms among the five families and 19 species identified. For one species, this was the first time it was ever recorded feeding in a Sitka spruce tree.



8. Crickets/grasshoppers (Orthoptera)

These are not major lifeforms in the rainforest, and thus Neville has found a total of only three families and seven species. One cricket species has been recorded in the tops of the ancient trees.



9. Stoneflies (Plecoptera)

The stoneflies collected in this study breed mainly in the waters of Carmanah Creek, and Neville's study did not include sampling aquatic insects. But so far he has catalogued five families and nine genera trapped in the rainforest. The real question is, what are these aquatic insects doing in the canopy? What is the connection of the creek to the tree tops?



10. Psocids (Psocoptera)

Formerly known as book lice or bark lice, these tiny insects feed on mould and other growths on trees. Sampling them primarily in the canopy, Neville turned up nine families and 13 species. With 80 percent of all Psocids identified, Neville can report one new species.



11. Caddisflies (Trichoptera)

Similar to stoneflies, caddisflies spend most of their life in water. But adults will stray into the forest, and with 80 percent of his specimens identified, Neville has found five families and 14 species.



12. miscellaneous

Neville's research has turned up three different orders of millipedes from the Class Diplopoda, for a total of four families and five species. One of the millipede families has never before been recorded in Canada. He also found one species of earwig in his traps.

IT ADDS UP TO CAUTION.

Neville's findings prove that the ancient temperate rainforest is saturated with insects of all kinds; the numbers seem incalculable. But when you ask Neville to explain how significant all these insects are to the ecological stability of the ancient temperate rainforest, he admits he simply doesn't know.

"But that's the whole point," he says. "Since we really have no understanding of the full range of insect species that inhabit the rainforest, and since we have absolutely no idea how the ancient temperate rainforest ecosystem works, the last thing we should be doing is liquidating our last large intact watersheds."

Continues Winchester, "If we log the last remaining ancient temperate rainforests, we will make extinct hundreds of species of lifeforms that are unique to that old-growth environment, many of which we haven't yet identified."



Left top and bottom: Sorting in UVic lab specimens collected in Upper Carmanah

Right top: Clear winged sphinx moth

Bottom right: One type of insect trap

The marbled murrelet saga: climbing to new heights

The story of the Upper Carmanah, more than anything else, is the story of how expert (and dedicated) rock climbers adapted modern climbing techniques to scale the towering old-growth Sitka spruce, western redcedar and western hemlock. They climbed for two reasons: to carry out the canopy insect research, and to search for marbled murrelet nests.

John Kelson was one of the first climbers to appear in the Upper Carmanah, and he was instrumental in establishing the original research platforms. But he is best remembered as the climber who scaled tree after tree in the Carmanah and neighbouring Walbran Valley hunting for a most elusive goal--the nest of a marbled murrelet. Fewer than 30 such nests have been found worldwide, and until Kelson began his quest, none had been found in British Columbia, although thousands of marbled murrelets living in the offshore waters are observed flying in and out of the old growth forest at dusk and dawn during nesting season.

Now virtually non-existent south of the border--almost all of their old growth coastal forests are logged--the marbled murrelet is found primarily along the coasts of British Columbia and Alaska. The bird is officially designated as "threatened", which is just one step away from "endangered". The Carmanah and the neighbouring Walbran valleys appear to be the nesting area of the densest populations of marbled murrelets in all of British Columbia.

University of Victoria seabird biologist Dr. Alan Burger, supported with funds from the World Wildlife Fund and a number of other benefactors, has supervised marbled murrelet study teams in the Carmanah Valley for four summers, trying to learn more about the kinds of old-growth habitat the marbled murrelets prefer.

"The Carmanah is basically an intact watershed," says Dr. Burger, "making it one of the few places where we can carry out a comprehensive study of marbled murrelet behaviour."

Because the marbled murrelet is dependent on old-growth forests for its



survival, says Burger, the little seabird acts as an indicator of the health of the forest as a whole. As the old-growth continues to be logged, the number of marbled murrelets is likely to decrease.

In 1990 John Kelson, together with marbled murrelet researcher Irene Manley, climbed over 40 trees in the Carmanah and adjacent Walbran Valley looking for one tiny marbled murrelet nest. Being careful neither to damage the trees nor disturb potential nests, they finally found what they were looking for high in an old Sitka spruce tree in the Walbran.

It turned out to be little more than a small depression in a mat of green moss blanketing a thick branch of the tree. It was not occupied at that time; the only clear indication Kelson had that he had truly found a bird's nest was the little circle of bird dung surrounding the nest's perimeter. Later in the laboratory it was confirmed to be marbled murrelet poop.

A year later Kelson and Manley returned to the same area and found another nest in a nearby tree, re-enforcing the point that the Walbran is a rich nesting habitat for the marbled murrelet. Yet all around these two nesting trees the ancient forest of the Walbran Valley kept falling to the chainsaw.

Although researchers regularly viewed marbled murrelets flying up the adjacent Carmanah Valley, they were never able to find an actual nest in the forest canopy of the Carmanah until last year. It turned out to be hidden away in a western hemlock tree located



Upper Carmanah foot-bridge in winter

a short walk from the research station itself.

Clearly, marbled murrelet nests are not easy to find--even though they can be all around you. Alan Burger has been trying to get across the significance of this point to government and industry for years now.

"I find it disgraceful," say Dr. Burger, "that we have a seabird species designated as threatened, and yet we continue to allow its prime nesting habitat in the Walbran--and possibly in the Upper Carmanah--to be destroyed by logging".

WCWC continues to battle in court to get the federal government to do an environmental assessment of the area because of its obligation to protect nesting migratory birds. Under the International Migratory Birds Convention, federal regulations make it illegal to disturb nesting Marbled Murrelets. So far the federal government has refused to do the assessment and the Federal Court at trial ruled against WCWC. The committee waited over two years to get a written decision, an unprecedented amount of time. Meanwhile, suspected nesting sites were destroyed by clearcut logging. The apparent disinterest expressed by the court discourages those who seek resolution of environmental disputes through the legal channels.

The Committee recently filed notice of appeal. This is another expensive endeavour that taxes the limited funds of the Committee.

PROJECT PHOENIX



Rebuilding the bridge - Project Phoenix

Tragedy struck the Upper Carmanah research station in October 1990 when vandals cut the foot bridge across the canyon at the start of the trail in half, smashed and ripped up almost all of the boardwalk and burnt the research frame tent with all the equipment to the ground. The heat was so great that it melted and burned a couple of aluminium ladders. Nothing survived the fire but a severely singed copy of Joseph Conrad's *Heart of Darkness*.

Over \$30,000 worth of materials and an incredible 8,000 hours of volunteer time were lost.

The attack on the station occurred at the same time as a pro-logging group blockaded the road preventing tourists and Wilderness Committee volunteers from entering the area. No one was ever charged for blockading the road or destroying the station.

WCWC immediately responded with project Phoenix -- a campaign to build a bigger and better research facility than before. Over the next few months hundreds of volunteers flooded into the Upper Carmanah to do the work. Gogo mills of Nanaimo donated thousands of dollars worth of cedar and American Fabricators another larger tent covering. The station was up and running for the 1991 research season.

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Biology Co-op student Irene Manley, made use of the research station to study the nesting habits of an elusive seabird called the marbled murrelet. This research has already made significant finds, including the discovery of three marbled murrelet nests nestled high in the canopies of old-growth trees, the first such discoveries in B.C.

A third and on-going research project working out of the Upper Carmanah research station is a study of amphibians being conducted by Ted Davis, also from UVic. This is linked to a global effort spearheaded by the International Union for Conservation of Nature (IUCN) to track the population size of amphibians, a class of animal that research is showing is in decline around the world.

A number of other researchers have used the research camp to investigate life processes in the intact old-growth forest. Most recently, a researcher arrived in the valley from Germany to study the river's flooding patterns.

When the Upper Carmanah is fully protected, the Wilderness Committee plans to turn the facility over to a university committed to maintaining the station or donate it to the Dididaht First Nations to manage as a combined ecotourism, research and educational institution.

Breakthrough research on a shoestring budget

On June 26, 1993, David Attenborough, star of countless BBC nature programs, along with a video crew from the Ted Turner satellite network, trekked into the Upper Carmanah and were hoisted up into the main research platform. The significance of the canopy research is not lost on the international media, nor is it lost on the international scientific community that continually asks Neville Winchester for more information on his procedures and findings.

So you might expect the canopy station and research projects, the darling of the B.C. scientific community, to be well funded today. They're not. WCWC struggles to maintain the station during the research season, April to October, succeeding to do so only through thousands of small donations from supporters and friends.

The B.C. government funding for the insect studies (provided through the Research Branch of the Ministry of Forests) actually dropped in 1993 to \$15,000, down from \$35,000 the previous year. Winchester appreciates the fact that the forest ministry acknowledges the importance of his work, but the funding provided is not adequate to meet the project's basic needs.

For the past three years, Winchester and a small crew worked long and hard setting out a complex range of insect traps in the forest canopy, on the forest floor, and in nearby clearcuts. The traps had to be tended and specimens collected on a regular basis. At other times the same crew members worked for the Wilderness Committee or the marbled murrelet study team, combining forces as needed to ensure all the necessary field work got done.

The money to build the Upper Carmanah research station camp came originally from the profits of the award-winning best seller coffee table book, *Carmanah Valley - Artistic Visions of an Ancient Rainforest* published by the Wilderness Committee in 1989. Since then, the Committee has been raising money continuously from its members and the general public to sustain the station's operations -- so the international community of naturalists and forest researchers can continue to seek the secrets of the ancient temperate rainforest.



Joe Foy's kids on boardwalk to station

A RARE AND ENDANGERED ECOSYSTEM

Everything in nature has a purpose. The possibility that logging the remaining old-growth forests will make certain species go extinct -- before we even know what they are -- runs against our basic desire to know and learn.

-- University of Victoria entomologist Richard Ring.

Temperate rainforests are extremely rare, covering about 0.2 per cent of the Earth's land area. About one-half of all the world's remaining temperate rainforests grow along the west coast of Canada and the United States from Alaska to Oregon.

These exceptional forests have most of the world's biggest trees, notably Sitka spruce, western redcedar, and Douglas fir. Far exceeding tropical rainforests in the volume of plant biomass they contain per hectare, the temperate rainforests in North America take on their most luxuriant expression around the Olympic Peninsula of Washington State and the neighbouring southwest side of Vancouver Island. The oldest trees in B.C.'s rainforest may have as many growth rings as there are years on the Christian calendar.

The larger trees in the Upper Carmanah are easily 61 metres (200 feet) tall; their trunks more than 6 metres (20 feet) around. This is about average for the older dominants in the Vancouver Island ancient temperate rainforest, where the tallest trees reach more than 91 metres (300 feet) and the biggest trees are almost 6 metres through.

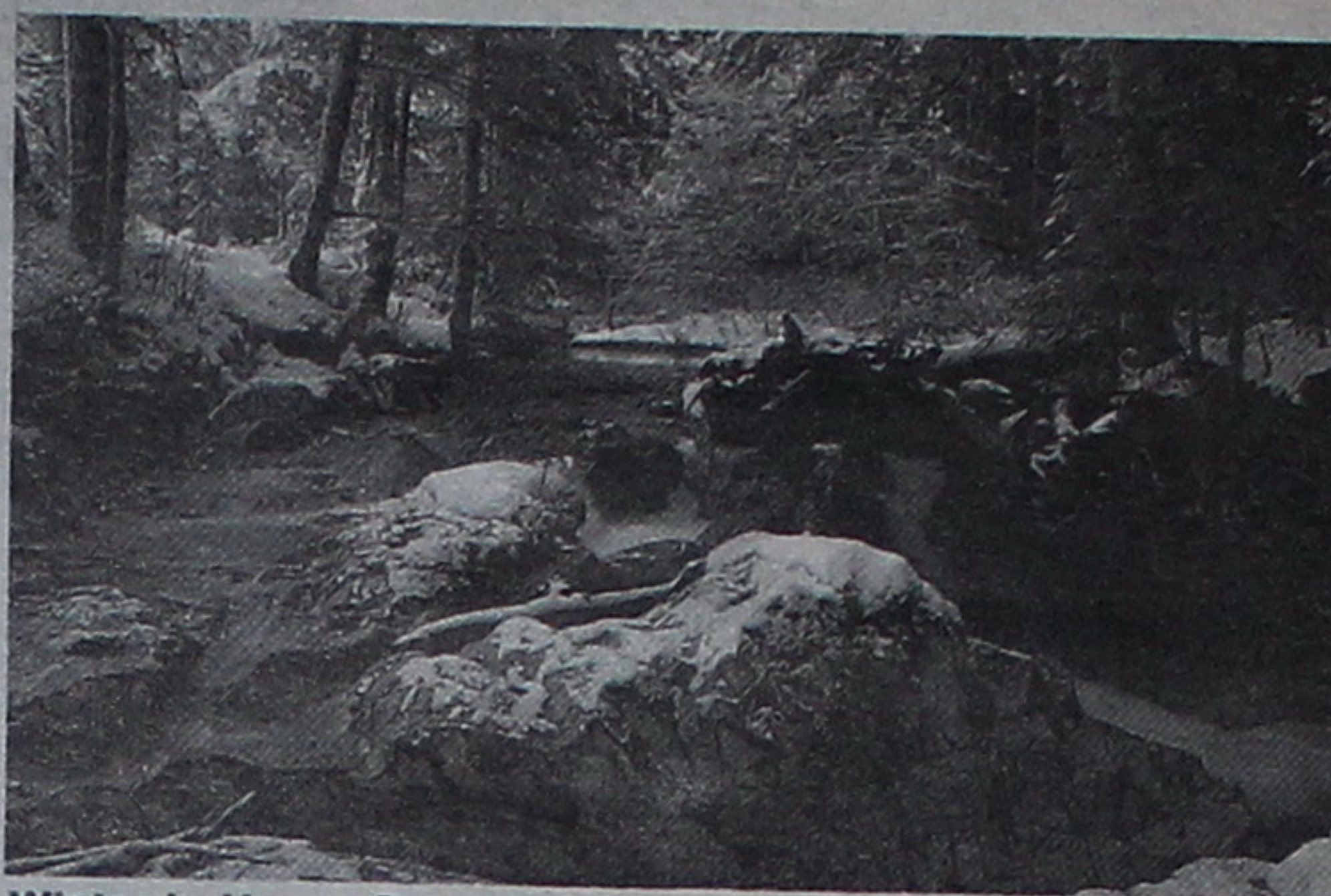
Prior to the industrial era, some 2.3 million hectares of ancient temperate rainforest blanketed Vancouver Island. Today, approximately 100,000 hectares of that rainforest is protected from development -- slightly more than four per cent of the Island's original forest cover.

Just 25 per cent of the ancient temperate rainforest that existed on southern Vancouver Island in 1954 is still intact today. And much of that exists in smaller patches scattered across the landscape. Only the Carmanah Valley, together with a couple of neighbouring watersheds, remains essentially in a wilderness state.

If the current rate of logging is not decreased, virtually all unprotected forests on the southern half of the Island will be logged by the year 2001, and the northern half of the Island by 2022.

For Neville Winchester, these statistics forecast ecological disaster. "It is essential that we set aside large, unfragmented watersheds if we are to maintain the ecological integrity of these unique forests. And there are so few opportunities left."

-- Statistics courtesy of the Sierra Club of Western Canada



Winter in Upper Carmanah Valley

Crawling with reasons for preservation

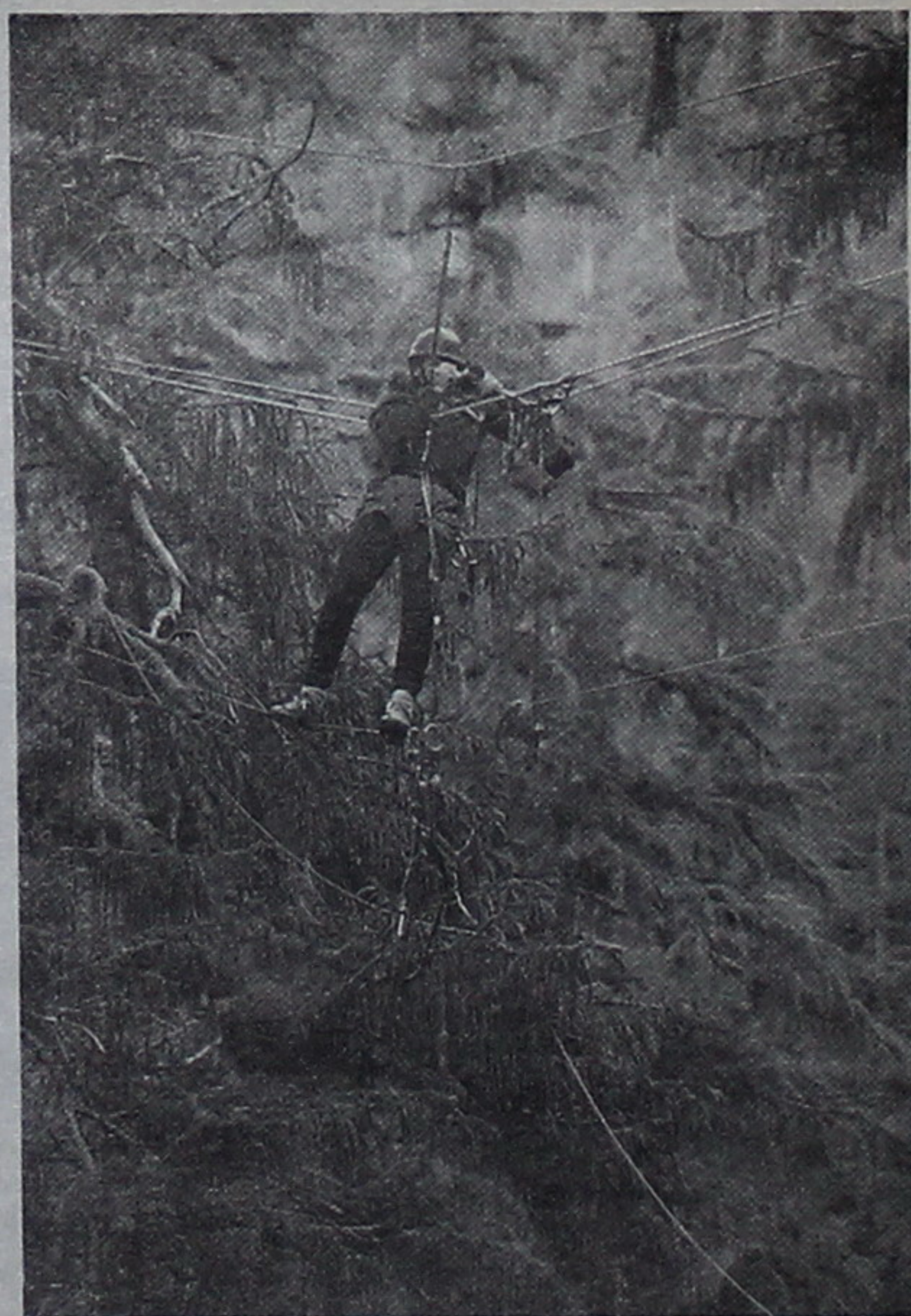
The canopy of British Columbia's ancient temperate rainforest literally is crawling with lifeforms entirely new to science.

Just ask UVic entomology instructor Neville Winchester.

"By the time we complete our study in the Upper Carmanah, we will have discovered at least 200 new species of insects that live in the old-growth coastal forest," says Winchester. "And that's a very conservative estimate".

Many of these newly discovered lifeforms are permanent residents of ancient forest's canopy. Here, among the thick moss mats that blanket the massive tree branches, hides a unique habitat containing a unique community of insects. And like so many other aspects of the coastal rainforest, scientists know virtually nothing at all about this canopy habitat--how it contributes to the stability and longevity of the trees and its overall importance in this ancient forest ecosystem.

One of the most significant finds Winchester has made so far is the fact that many of the insects that make their home in the ancient temperate rainforest are definitely not found in second-growth forests. They are unique to the old-growth. It takes at least several hundred years for one of their key habitats to develop in a growing tree, the thick moss pads on the large branches.



Marbled murrelet researcher in canopy

Contrasting government priorities

Amount of money the British Columbia government spent in 1993 on a public relations newspaper sent to every household in the province in an effort to justify its decision to log two-thirds of the remaining temperate rainforest in Clayoquot Sound--the largest intact low-elevation big-tree temperate rainforest left.....\$220,000

Amount of money the British Columbia government spent in 1993 to support research into discovering new insect lifeforms in the canopy and forest floor of Vancouver Island's ancient temperate rainforest in the Upper Carmanah--the only study of its kind in the world.....\$15,000

NDP government refuses to add Upper Carmanah Valley to Park

At a meeting with Environment Minister John Cashore in January 1993, Joe Foy, head of WCWC's national campaigns, asked the B.C. government to designate the 3,300 hectare Upper Carmanah Valley as a "Park Study Area" so that WCWC's research area would be considered for full protection. Noting that it was the former government that made the ecologically unsound decision to save only the lower half of the watershed as park, Foy figured that the new government could easily begin to right this wrong.

Despite evidence that any logging in the upper watershed, where the highest intensity rainfall storms on the Canadian coast occur, would degrade the flood plain in the middle valley and threaten the park, the answer given by the minister four months later was "no".

MacMillan Bloedel is currently developing logging plans for Upper Carmanah's steep ancient-forested slopes which stabilize soils and protect Lower Carmanah Valley from flash floods. Logging would put the WCWC ancient forest canopy research station out of business as well as put at risk the park in the lower half of the valley.



Photo above: Campsite in clearcut nearby trailhead to Upper Carmanah research facilities

Photos right and below: View looking down from 20 stories up in main the research tree - detail showing two people below



BECAUSE YOU CARE WRITE:

**Premier Mike Harcourt
Legislature Buildings
Victoria, B.C. V8V 1X4**

Tell him how important you think old-growth forest research is....And how important the Upper Carmanah Canopy research station is to learning the secrets of the ancient temperate rainforest. Tell him whether you want the Upper Carmanah logged or left alone and added to Carmanah Pacific Provincial Park.

Yes! I will help save Upper Carmanah Valley and support WCWC's Canopy research station!

☐ I have written a letter to the Premier telling him how important I think the Upper Carmanah Valley Canopy Research Station is.

☐ I will help financially. I want to adopt a tree.
Please name my tree _____. My adoption "processing fee" tax deductible* donation of \$25 for each tree is enclosed.

(A beautiful personalized certificate with your tree's name calligraphied on it acknowledges your tree adoption).

☐ I have already adopted a tree but I know you need continuing funds.
Enclosed is my deductible* gift of \$25 \$50 \$100 \$500
_____ other to help maintain WCWC's rainforest canopy research station and preserve the ancient temperate rainforest in the Upper Carmanah Valley!

*Revenue Canada Tax Reg. No. 0587113-21-28

☐ I want to become a Western Canada Wilderness Committee member.
Enclosed is my \$30 annual membership fee.

Name _____ Address _____
_____ City _____ Province _____ Postal Code _____

Please return to Western Canada Wilderness Committee, 20 Water St., Vancouver, BC V6B 1A4

Thousands of small donations keep the Carmanah station going

The Western Canada Wilderness Committee provides basic camp facilities and a camp coordinator for the Upper Carmanah Research Station, and the researchers arrange their own project funding. It continues to be a struggle for WCWC to find the funds to maintain the camp.

During the last three years WCWC has relied on its "adopt-a-tree" program to fund the station's operation. People donate \$25, and select a name for "their" tree, thereby symbolically adopting an old-growth tree in the Upper Carmanah Valley. The adopting parents, in exchange, get a beautiful individualized certificate acknowledging the adoption. Of the more than one million trees "eligible" for adoption, WCWC has "placed" over 3,000 trees. WCWC is constantly searching for new prospective "parents".



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Dedicated to the hundreds of volunteers and "tree adopters" whose help made and continues to make the Upper Carmanah Research Station an outstanding success. A special thanks to the photographers for donating their images.