



# In Defence of Canada's Spotted Owl

December 2005



WESTERN CANADA  
WILDERNESS  
COMMITTEE



SIERRA LEGAL  
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This report was prepared jointly by Sierra Legal Defence Fund (Sierra Legal) and the Western Canada Wilderness Committee (Wilderness Committee).

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## EXECUTIVE SUMMARY

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# In Defence of Canada's Spotted Owl

In 2004, during an icy-cold winter, a single government biologist repeatedly hiked out into the old growth forests near Lillooet, British Columbia. The reason for his solitary journeys was to feed two juvenile northern spotted owls so they would not starve to death over the lean winter months. The need to augment the diets of the young owls was beyond compassion – it was critical to the continued survival of the species in Canada.

Historically estimated at 500 pairs, spotted owls once thrived in southwestern British Columbia's, the only place in Canada where they are found. But owls depend on healthy ranges of old growth forests – the same forests prized by loggers. In a province where unsustainable logging has been practiced for generations, owls stood little chance. In 2005, biologists, combing the tattered remains of southern BC's old growth forests, could find only six pairs.

In the fall of 2002, Forest Watch of British Columbia, Sierra Legal Defence Fund and the

**... the spotted owl, without intervention, will likely disappear from the wild in BC in just 5 years.**

Western Canada Wilderness Committee released *Logging to Extinction: The Last Stand of the Spotted Owl in Canada* to chronicle the

sad plight of Canada's most endangered bird. That report described a systemic, provincially sanctioned process of logging spotted owl forests under the guise of "habitat management," and revealed the BC government as the largest logger of owl habitat.

Based on this startling information, the report called on the provincial government to immediately stop logging in all critical owl habitat and to implement adequate habitat protection for the spotted owl in the remaining old growth forests in its historic range.



Photo: Art Wolfe

Since *Logging to Extinction* was published, three years have passed; the measure scientists use to confirm the successful creation of a new generation of spotted owls. Was progress made in rescuing this species? Unfortunately, the answer is no. *In Defence of Canada's Spotted Owl* chronicles a provincial government that has not only steadfastly avoided habitat protection for spotted owls and other at risk species in British Columbia, but has also taken deliberate steps to reduce the owls' chance for survival.

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For example, even though some of BC's largest logging companies withdrew their operations from remaining spotted owl habitat following the release of *Logging to Extinction*, this report reveals that the BC government is still the largest logger of owl habitat and, since 2002, has actually *increased* logging in owl habitat.

And the federal government, which has the ultimate responsibility to protect endangered species in Canada, has sat on its hands and watched the provincial BC government push the owl to the brink of extinction.

Although the Spotted Owl Recovery Team has concluded the owl is recoverable, the most pressing concern for both levels of government appears to be not how best to recover the spotted owl population - which is now reduced to just 23 birds - but how best to manage the public relations debacle if the owl becomes extinct right before the 2010 Winter Olympics. According to government scientists the spotted owl, without intervention, will likely disappear from the wild in BC in just 5 years – the first wildlife casualty of BC's history of unsustainable logging.

Anticipating this ecological crisis and the impending media spotlight, government officials advise us that the BC Cabinet is poised to make a decision about the spotted owl. Over the next

couple of months the provincial government will decide either to protect habitat to allow for the recovery of the owl, or to focus on population augmentation in lieu of adequate habitat protection and let the owl disappear from the wild. It is a poorly kept secret that the last option is preferred.<sup>1</sup>

If the spotted owl is to survive in Canada, logging in its habitat must immediately stop and sufficient suitable habitat must be protected and recruited to allow for recovery of the owl to a sustainable population of 125 pairs.

In 5 years the eyes of the world will be on British Columbia as it hosts the 2010 Winter Olympics. Will the provincial government fulfill its promise to host an environmentally sustainable Olympics by protecting the habitat of one of the most endangered species in Canada, or will they continue to ignore their promise of sustainability and allow the owl to vanish from the old growth forests of British Columbia?

For our part, we will not be passive witnesses to extinction. Concurrent with this report, we are launching a federal court case, the first under Canada's *Species At Risk Act*, to try to compel the federal government to finally fulfill its promise to Canadians to protect endangered species, beginning with the rapidly disappearing northern spotted owl.



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# Spotted Owl in Court

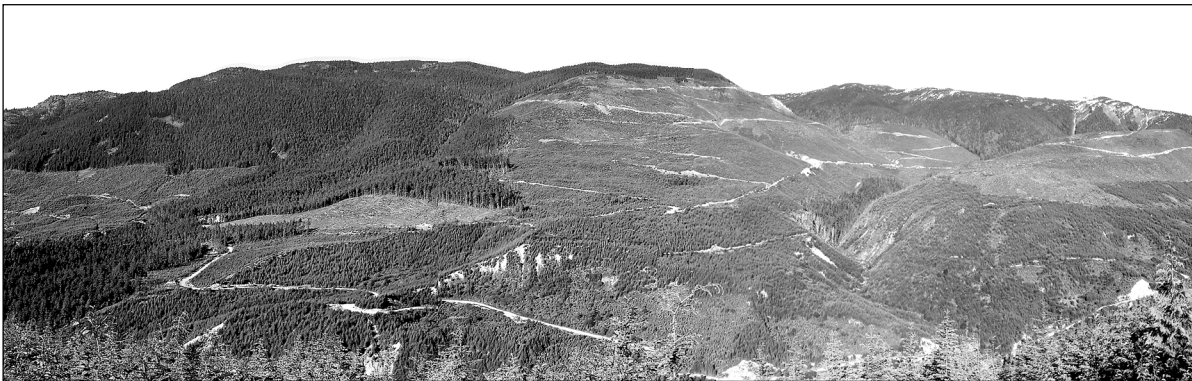
Concurrent with the release of this report, Sierra Legal Defence Fund is commencing a federal court lawsuit to trigger the protections afforded by the federal *Species At Risk Act* (“SARA”).<sup>2</sup>

Based on evidence of the BC government’s failure to protect the spotted owl, and the continued logging of its habitat, the court case will seek to force the federal Environment Minister, Stéphane Dion, to use SARA’s emergency provisions to protect the spotted owl in British Columbia.

This move to the federal courts comes after Sierra Legal has exhausted all legal avenues in British Columbia’s Supreme Court and Court of Appeal. Although the legal cases started with a success – the first injunction in Canada halting logging in endangered species habitat – later court decisions found that BC’s laws were inadequate and provided the spotted owl with no protection:

“The [BC] Legislature could have enacted legislation that protects the Owl from the risk of extirpation caused it by the harvesting of old growth forests. In my opinion, it did not do so....”<sup>3</sup>

The federal court case is the last legal avenue for defending the spotted owl. If won, the case may create sufficient pressure to bring about provincial or federal action to protect other species at risk. If lost, the case will at the very least expose British Columbia’s and Canada’s weak laws and shameful record in protecting its declining biodiversity.



In spite of the scarcity of habitat, logging by Cattermole Timber in the Siwash Creek drainage of southwestern British Columbia in an area “managed” for spotted owls was stopped only after a 2002 court order. At the time of this report, further logging had been approved in the Anderson Creek area which is adjacent to the Siwash Creek drainage. Photo: Joe Foy

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# The 2010 Winter Olympics – Legacy of Extinction or Sustainability?

In 2010, the eyes of the world will be on British Columbia as it hosts the Winter Olympics. As part of a successful bid to stage the Games, both the Canadian and British Columbian governments made a public promise to base the Olympics on high environmental standards:

*Canada sets high standards for environmental protection through legislation, regulation and industry codes of practice. All levels of government regulate management of the environment and natural resources in Canada and are committed to moving towards environmental sustainability as part of their strategic plans.<sup>4</sup>*

*Vancouver 2010 is deeply committed to enhancing environmental sustainability.<sup>5</sup>*

Despite these clear promises, it remains to be seen if this commitment to environmental sustainability extends to the spotted owl, mountain caribou and marbled murrelet - just a handful of the over 1,300 species that are currently at risk in British Columbia.<sup>6</sup>

Although British Columbia has the most biodiversity in all of Canada, it is one of the few provinces with no stand-alone endangered species legislation. Instead species at risk are managed through piecemeal legislation and weak laws that are constrained by arbitrary political and economic restrictions on habitat protection.

Rather than enacting strong laws to protect endangered wildlife the province increasingly allows logging and mining corporations to determine how species at risk are managed:

“We support industry-led endangered species recovery plans.”

BC Premier Gordon Campbell <sup>7</sup>

In the case of the spotted owl, the refusal to adequately protect the species extends even further. While the BC government is in charge of recovering the owl, one of the most critically endangered species in all of Canada, it continues to be the largest logger of owl habitat through its BC Timber Sales Program.

Surprisingly, the federal government, which has the legal authority to protect the spotted owl under the *Species at Risk Act* (SARA), is also undermining Canada’s commitment to a sustainable Olympics by refusing to use SARA to protect the spotted owl. Instead, the Canadian government is standing on the sidelines, allowing BC to log the owl into extinction and tarnish Canada’s commitment to an environmentally sustainable Olympics.



Photo: Wayne Lankinen

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# BC's Species at Risk Coordination Office – Science or Politics?

In October 2004, seven months before a hotly contested provincial election, the BC Liberal government created a Species at Risk Coordination Office (SARCO) to, they said, address mounting public concern for the future of three endangered species: spotted owl, mountain caribou and marbled murrelet. The government announced that the Office's mandate included "collaborating across government to ensure B.C.'s approach to the management and, where appropriate, recovery of provincial species at risk is second to none."<sup>8</sup>

Considered by conservationists to be a hollow gesture by a government wishing to "green" itself before an election, SARCO was hamstrung at the outset by insufficient funding, a lack of expertise, and high-level political intransigence regarding species protection.

Post election, SARCO is now ensconced within the Ministry of Agriculture and Lands, (Land Management Bureau) where, according to their 2005 Service Plan, its primary focus has shifted from "protection" to "managing" species at risk "while furthering access to Crown land and resources."<sup>9</sup> Recovery of species at risk, far from being "second to none," now is second to furthering "B.C.'s ability to attract and support investment" while providing "one-stop shopping" for businesses concerned with accessing Crown lands.

Perhaps the most telling aspect of SARCO's newly refined mandate is its emphasis on "globally significant species."<sup>10</sup> This approach prioritizes species based on whether globally significant populations exist in or outside of BC.

While at first blush this approach appears to be a common sense method of protecting BC's most important species at risk, further examination reveals that SARCO actually intends to apply its "global" filter to eliminate BC's responsibility to protect at risk species because the vast majority of BC's endangered species are on the periphery of their range or "not globally significant." For a provincial species at risk to be considered as a top priority for protection it would need to be an endemic population that only existed in BC.

Neither biologically defensible nor morally responsible, this approach contravenes the United Nations Convention on Biological Diversity, Canada's ratification, of which BC supported, as well as the Canadian Species at Risk Accord, which BC ratified, in which the provincial government promised to maintain healthy populations of wild and native flora and fauna across their natural geographic range.

This represents a radical shift from a rational, scientifically defensible conservation approach to a narrow economic approach, underscoring both the ideological limitations of SARCO and the government's intention to ignore the basic biological requirements of British Columbia's over 1,300 species at risk.

Lastly, for the spotted owl, SARCO has yet to justify its existence particularly as the Spotted Owl Recovery Team has been actively planning recovery strategies for the spotted owl since 2002. Most likely, the formation of SARCO can be attributed to the fact that, in 2003, the Recovery Team recommended a moratorium on logging in spotted owl habitat while recovery planning was ongoing and, in 2004, delivered a recovery strategy to the BC government. In this context, SARCO's formation may be seen as an exercise to deflect public scrutiny from the BC government's continuing failure to act on recommendations to recover the owl. Otherwise, with the Recovery Team having already made recommendations for actions to recover the species, why is SARCO independently drafting recovery options? (see next section)

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# The BC Government's Spotted Owl Options – Recovery or Public Relations?

On October 3, 2005 environmental organizations met with representatives from the Species at Risk Coordination Office (SARCO) to discuss recovery strategies for the spotted owl. At the meeting, SARCO presented four options they were considering to address the spotted owl crisis.

The options ranged from protection and recruitment of habitat, complemented by population augmentation (such as captive breeding), to deferring or eliminating additional habitat protection and relying almost solely on captive breeding.

Conservationists pointed out that to recover the spotted owl to a sustainable population of 125 pairs, habitat protection, combined with population augmentation, was the only scientifically credible option. Captive breeding, if conducted in lieu of

habitat protection, would actually preclude recovery of the species by allowing the owls' future habitat to be logged, and would result in captive-bred spotted owl chicks being released into a landscape that could not support them.

Although the captive breeding option provides good public relations opportunities for a provincial government worried about negative publicity, its true intent appears designed to mislead the public and delay extirpation of the owl from BC until after the 2010 Winter Olympics.



Nothing is sacred in spotted owl habitat: Nesikep spotted owl site, logged in 2003.  
Photo: Jeremy Sean Williams

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# Science vs. the BC Forest Industry

*In Defence of Canada's Spotted Owl*, in describing the decline of the spotted owl in British Columbia, relies entirely on data produced by the BC government. More particularly, it relies on extensive data arising from spotted owl surveys that the BC Ministry of the Environment has conducted since 1991.

In 2002, the Ministry of Environment published a compilation of this data for the first time, highlighting the rate and cause of the decline of the spotted owl in British Columbia.<sup>11</sup> Known as the "Population Assessment," the information was a source of controversy because it challenged the Ministry of Forest's assertion that logging in owl habitat was well planned and sustainable. Although the Population Assessment had multiple authors and was peer reviewed, Ministry of Forests sought to discredit the report causing more delay as the Population Assessment authors were forced to release a second report to better substantiate their findings.<sup>12</sup>

Given that the population assessment report supported the argument that forest operations in owl habitat were a causal factor in the species' decline, the information was equally problematic for the BC forest industry, becoming particularly so when, in 2003, the Spotted Owl Recovery Team (SORT) relied on the Population Assessment in recommending that logging cease in owl habitat.

Concerned that the BC Cabinet intended to consider the Recovery Team's recommendation, in 2003, the Fraser Timber Supply Area Cooperative (Fraser TSA) obtained \$247,000 from the Ministry of Forests - Forest Investment Account<sup>13</sup> to undertake a "comprehensive review and analysis of existing spotted owl data." Representing logging companies in the Chilliwack and Squamish forest districts, which encompass significant spotted owl habitat, the Fraser TSA's intention was clear - discredit the Population Assessment. And it worked.

In fall 2003, the forest industry released their draft report which they distributed widely to both industry partners and government which, not surprisingly, challenged the Population

Assessment. The BC government's Spotted Owl Recovery Team (SORT) immediately condemned the draft report as being technically flawed and scientifically indefensible. In emails obtained by Sierra Legal through a request under the *Freedom of Information and Protection of Privacy Act*, the chair of SORT expressed amazement at the forestry industry receiving the funding for a report designed to undermine the government's own scientists when SORT's requests for funding were ignored:

"When this much money gets 'wasted' without producing a single bit of new science, when the SORT goes begging for badly need funds for new inventory and new science and gets far less than this."

So concerned were the members of the SORT that the forest industry report would be given credence that they wrote to the Assistant Deputy Minister of MWLAP and the Chief Forester.<sup>14</sup> But as discussed in November 2003 Cabinet documents, the Fraser TSA's research was a determinative factor in the decision to disregard SORT's recommendation to stop logging:

The Fraser TSA Association has hired scientists to review the SORT report... This methodology raises questions regarding the assertion that owl populations are declining under current management measures.

The Association... does not support the interim measures recommended by SORT due to their cost and questionable scientific basis.

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Therefore, in spite of a litany of prior monitoring work which demonstrated an extremely low spotted owl population as a result of logging, and that such conclusions were supported by the work of independent authorities such as the Committee on the Status of Endangered Wildlife in Canada, further spotted owl inventories were undertaken, at the expense of recovery planning



Silver Daisy spotted owl management area near Manning Park  
Photo: Joe Foy

and habitat protection. The intent of these inventories was to disprove the claims made by the Fraser TSA's research and firmly establish the critical nature of the owl population's decline in BC. This process took until 2004 but has now demonstrated conclusively that there was indeed no merit to the claims made by the Fraser TSA report.

Tragically, habitat continued to be logged while these efforts proceeded, and by 2005 critical owl recovery efforts had been even further compromised. With the survey of the last remaining remote and previously unsurveyed habitats there is no longer any legitimacy to the logging industry's claims that BC's spotted owl is not in serious trouble.

Whether the delay by the BC Cabinet in acting to protect the spotted owl will prove fatal for the population remains to be seen. For its part, Sierra Legal, on behalf of the Wilderness Committee, is continuing to pursue one avenue by forwarding a complaint to the Association of Professional Biologists of British Columbia alleging incompetence and misconduct on the part of the biologist who prepared the Fraser TSA Association's report.

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# BC's Forest Practices Board – Forestry Watchdog Condemns Government

On March 5, 2005, the Victoria Times Colonist ran an article entitled, “Province called ‘backwards’ in protecting BC species.” A sensationalist headline in a newspaper is not unusual, but what was unusual was that the article was based on a report by British Columbia’s independent forestry watchdog - the Forest Practices Board (FPB).<sup>15</sup>

The report, which concerned the BC government’s approval of logging in the habitat of a threatened old growth-dependent seabird, the marbled murrelet, concluded that government’s actions had not only failed to protect the marbled murrelet but were “inappropriate” and “inadequate.” The Board also remarked that there was a “systemic failure in government policy to protect endangered species.”<sup>16</sup> In particular the FPB expressed concern regarding the inability of government, given staffing and budget cutbacks, to adequately manage and conserve non-timber resources such as the marbled murrelet. Further criticism related to habitat protection being restricted by an “arbitrary” government policy (Identified Wildlife Management Strategy) that limited protection of endangered species habitat so that it would not impact the timber harvesting land base by more than 1%.<sup>17</sup>

In subsequent media interviews Bruce Fraser, chairman of the Board, went further in his

condemnation of government practices regarding species at risk. “They are trying to make science to fit policy, rather than policy to fit science. We think they have got it backwards.”<sup>18</sup>



Former spotted owl habitat, Nesikep 2003  
Photo: Jeremy Sean Williams

The criticism by the Board of the BC government’s endangered species policies was not an isolated event. Just six months earlier the FPB had come out with a hard-hitting report on BC’s critically threatened mountain caribou that urged the provincial government to take quick action to implement more effective conservation measures.<sup>19</sup> Similar to the spotted owl’s predicament, the caribou report identified increased logging activity and corresponding fragmentation of old growth habitat as the principle causes of the caribou’s rapid decline. The Board also expressed concern about the government’s reduced capacity to monitor logging and the impact of the new results-based *Forest and Range Practices Act* which the Board found “could be problematic where species are at risk and diminishing.”

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# Who's Watching BC's Forests?

When the BC Liberal government was first elected in 2001, it committed to “adopt a scientifically based, principled approach to environmental management to ensure sustainability, accountability and responsibility.”<sup>20</sup> Unfortunately, legislative rollbacks and dramatic staffing cuts to the ministries of Environment, formerly the Ministry of Water, Land and Air Protection, and the Ministry of Forests have seen this promise unfulfilled.

Between 2001 and 2004, over 1,500 government employees were cut from the two ministries. The Ministry of Forests saw 1,141 positions eliminated,<sup>21</sup> over 30% of which were scientific and technical officers.<sup>22</sup> The Ministry of Environment, already severely weakened by staffing and budget cuts under the previous New Democrat government, saw its full time employees plummet to just 924 people from 1,317 positions - a far cry from the 2,336 full time staff who worked for the Ministry in 1996.<sup>23</sup>

The combined cutbacks severely limit the ability of government employees to monitor BC's forests and enforce environmental safeguards. Today, one BC Forest Service employee is now

responsible for 18,000 hectares of forest land, whereas on US national forest lands, eight government employees are responsible for an equivalent geographic area.<sup>25</sup>

The staff cuts have been further exacerbated by the weakening of provincial forestry legislation: in 2003 the BC government introduced the controversial “results-based” *Forest and Range Practices Act* (FRPA) which replaced the more prescriptive *Forest Practices Code*. The new legislation has seen rules replaced with poorly defined government objectives allowing forestry companies, not government, to determine how logging will occur in BC's forests.

The new Act also depended on the ability of government to enforce it and, at the time it was introduced, the government announced an intention to enhance compliance and enforcement capacity. Yet the compliance and enforcement branch of MOF was one of the hardest hit under government cuts - 38% of its staff having been cut since 2001.<sup>26</sup>

The shift to increase corporate control of BC's public forests was underscored when the government removed the capacity of provincial government biologists to comment on the impacts of logging plans. This was further compounded when the environmental protection provision in the *Forest Practices Code*, which mandated that logging operations “adequately manage and conserve forest resources” was eliminated, replaced under FRPA with legislation that expressly prevents any environmental protection measure if it unduly reduce[s] the supply of timber from British Columbia's forests.

***“The end result is that threatened species such as the marbled murrelet are falling through the cracks . . . This situation will continue unless government sets a clear objective for conservation of endangered and threatened species, provides sufficient funding to resource ministries for planning and enforcement, and reviews the one per cent timber supply cap on wildlife habitat areas <sup>24</sup> .”***



# Industry Pulls out of Spotted Owl Management Areas

One of the higher profile components of *Logging to Extinction* was its list of the top companies logging in spotted owl habitat.

Upon release of the groundbreaking report and amidst a flurry of media attention, International Forest Products (Interfor) and Canadian Forest Products (Canfor), number 2 and 8 on the list respectively, withdrew their logging operations from spotted owl management areas. At the time Steve Crombie, Interfor's director of public affairs, commented, "New scientific information makes it appear that the problem is worse than everyone thought and we do not really want to be in the eye of the storm over this. Loggers care about the spotted owl too."<sup>27</sup>

The decision to defer logging in owl management areas was warmly applauded by conservation groups and media pundits who pointed out that industry was in fact addressing environmental and forest management needs before action was taken by a recalcitrant provincial government.

But in researching *In Defence of Canada's Spotted Owl*, it was discovered that the areas

deferred by Canfor and Interfor are in limbo. In February 2004, Interfor announced that it was withdrawing 100 percent of its logging operations from the Fraser Timber Supply Area <sup>28</sup> and on March 28, 2005, Interfor revealed that a \$21.7 million compensation package had been reached with the BC government regarding the loss of Interfor's cutting privileges on the BC Coast.<sup>29</sup> On October 28, 2005, Canfor and the provincial government announced an agreement where the logging corporation would receive \$62 million in compensation as part of the province's 20 percent redistribution of the corporation's logging rights.<sup>30</sup>

Conservationists fear that the deferred spotted owl cutblocks formerly in the tenure of these two companies will not be protected by the BC government and will instead be reallocated to First Nations, independent woodlot owners and the provincial government's BC Timber Sales Program - the largest logger of spotted owl habitat in the province.



# Status of the Northern Spotted Owl

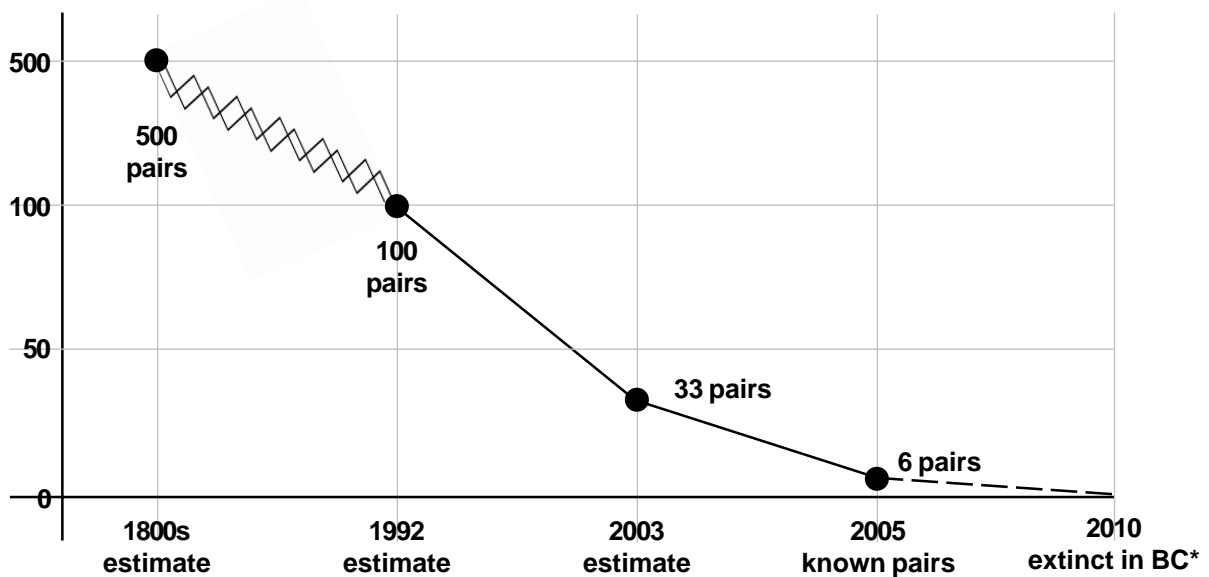
In 1986, BC government biologists began what would become an annual tradition of combing the ancient forests of southwestern BC searching for spotted owls. From Vancouver, north to Carpenter Lake, east to Lillooet, and south to Manning Park, the known range of owls in Canada, biologists noted areas that owls regularly inhabited and used this as a basis for determining the status and health of the population.

Almost immediately, they discovered a disturbing trend: each year they found fewer and fewer places with owls. Even river valleys like the Anderson, which formerly had numerous pairs of owls, were silenced as the cycle of owl discovery, followed by owl disappearance, repeated itself.

Biologists have used habitat suitability to estimate BC's pre-European spotted owl population at approximately 500 pairs<sup>31</sup> and surveys between 1986 and 2005 resulted in the detection of spotted

owls at a total of 76 sites. Alarming, today only 17 sites are known to be still active.

In terms of numbers, spotted owls have declined in BC from the estimated 500 pairs prior to the commencement of industrial logging to an estimated 100 pairs in 1992,<sup>32</sup> 33 pairs in 2003,<sup>33</sup> 8 pairs in 2004 and 6 pairs in 2005, with 11 single owls, or totalling 23 owls. At its current rate of decline, government scientists forecast that the spotted owl will be extinct in BC before 2010.<sup>34</sup>



\* Approximate date of extinction in BC without protection of all remaining habitat and population augmentation.

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# Why the Decline?

While habitat loss is largely accepted as the principle cause of the owls' precipitous decline, there is debate about the implications of other factors that contribute to the owls' decline including: barred owl competition; increased predation (higher levels of predators such as barred owls and great horned owls in newly fragmented forests); loss of prey (also complicated by habitat loss); pathogens; persecution; and, lastly, the "Allee effect"- the odds of finding a mate decreasing as species population diminishes in size.<sup>35</sup>

What is not a subject of debate is that spotted owls in British Columbia have lost much of their original old growth forest habitat - over 70 percent of the owls' low elevation forest in BC has now been logged<sup>36</sup> - and continuing commercial logging in owl habitat exacerbates, compromises and possibly precludes recovery.

But in the context of the known link between habitat loss and owl population declines and the scientific uncertainty about the implications of the myriad other factors, there is only one reasonable path to follow in contemplating protective measures for the spotted owl - the precautionary principle. The Supreme Court of Canada described the precautionary principle as follows:

"In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation."<sup>37</sup>

To honour this principle and ensure the owls' recovery, the BC government must stop logging

in spotted owl areas and stop postponing habitat protection. If the owl is to not only survive but also recover, all remaining spotted owl habitat must be protected, as well as suitable spotted owl habitat recruited.

**If the owl is to not only survive but also recover, all remaining spotted owl habitat must be protected, as well as all suitable spotted owl habitat recruited.**

Moreover, the benefits of doing so extend far beyond the spotted owls, as they are only one of many old-growth dependent species in the forests of southwestern BC, including at least 22 species designated at risk, either nationally or

provincially, as of 2004.<sup>38</sup> Because the spotted owl is one of the few top level predators on this list, it is considered an indicator species in that it is sensitive to ecosystem disturbances and can be used to gauge the overall health of the old growth forest system in which it lives.<sup>39</sup>

Preliminary assessments by the original Spotted Owl Recovery Team (1994) found that there were approximately 71 species of vertebrates (4 amphibians, 34 birds, 17 mammals, and 16 fish), 67 species of vascular plants and 138 species of arthropods (60 insects, 22 millipedes, 1 spider, 7 harvestmen, and 49 molluscs) closely associated with spotted owl habitat in Canada. Although the diversity of non-vascular plants (bryophytes, fungi and lichens) was not assessed by SORT (1994), federally mandated assessments in the United States (FEMAT) have found that

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hundreds of species are similarly dependent upon intact late-successional and old growth forests used by spotted owls. This includes 106 bryophyte species (mosses, liverworts and hornworts), 527 fungi species, and 157 lichen species.<sup>40</sup> Of the co-occurring species published by SORT (1994) (excluding arthropods), 24% are provincially designated at risk.

Therefore, protecting the spotted owl has the additional benefit of protecting a significant number

of other species at risk, many of which are also primarily threatened by the loss and fragmentation of late-successional and old-growth habitat by industrial logging.

While it may be a bitter pill for politicians and the logging industry to swallow, protecting the spotted owl and British Columbia's Lower Mainland old growth forest ecosystem, requires protecting habitat.



Former spotted owl habitat near Lillooet, BC. Logged 2003  
Photo: Jeremy Sean Williams

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# “LEMON” Logging

Of the several scientifically invalid bases upon which the BC government relies to approve continued logging in spotted owl habitat, the most offensive is “LEMON” logging or “Logging to Enhance or Maintain Nature.”

The origin of LEMON logging arose from the Spotted Owl Management Plan (SOMP), which advocated logging in forests to “improve” them for spotted owls. What scientists envisioned as logging companies practicing “silviculture” (the tending of young forests to accelerate growth) in a way that would achieve old-growth attributes more rapidly, quickly turned into commercial logging - a result that in any event fit nicely with the government’s intention to reduce the impact of spotted owl management on logging.<sup>41</sup>

This occurred even though SOMP itself acknowledged there was no scientific basis for “LEMON” logging and scientists and forest managers alike generally shunned the idea of experimentally logging the habitat and nesting grounds of critically endangered species,

principally for ethical reasons.<sup>42</sup> Indeed, it is well established in the scientific literature that old growth forests cannot be “maintained or improved upon” through industrial logging.<sup>43</sup>

**Even though the northern spotted owl has been designated “endangered” in Canada by COSEWIC since 1986 and is on BC’s “red list” for the most endangered species, BC has never designated the spotted owl for legal protection.**

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# Spotted Owls in the United States

In the United States, owls fared somewhat better than in BC although the US owl plan, known as “FEMAT Option 9” was heavily criticized by the principal scientific architects of owl protections in the US,<sup>44</sup> because the protection plans were non-scientific compromises implemented by bureaucrats against the advice of scientists.

Not surprisingly, although the US has stronger legal and policy mechanisms to regulate the logging industry and the somewhat superior prescriptions in “FEMAT Option 9,”<sup>45</sup> spotted owl numbers are also declining in the US. For example, southern populations of the northern spotted owl in Oregon are decreasing at four percent per year,<sup>46</sup> and in Washington<sup>47</sup> owls are decreasing by ten percent annually.

In response to the falling US spotted owl populations, two former Chief Executive Officers (Chief’s) of the US Forest Service have called for an end to the logging of old growth forests.<sup>48</sup>

Although recovery measures and logging restrictions in the United States far exceed BC’s meagre measures for the spotted owl, there is one striking similarity between both jurisdictions - conservationists are being forced to resort to lawsuits to force government officials to implement long-promised recovery measures for the owl. On November 7, 2005, the Seattle Audubon Society filed a lawsuit in United States federal court over the failure of the U.S. Fish and Wildlife Service to file a recovery plan for the Northern spotted owl. That action asks for an order that the recovery plan be implemented within six months.

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# BC Tax Dollars at Work – Logging Endangered Species Habitat

In *Logging to Extinction*, we identified the top ten logging companies operating in spotted owl management areas. Following the publication of our report, two of the largest, International Forest Products and Canadian Forest Products, withdrew their logging operations from owl management areas.

However, the government’s Small Business Forest Enterprise Program (SBFEP), now known as BC Timber Sales (BCTS), not only continues to hold its title as the largest logger of spotted owl habitat, it has actually increased the areas being logged.

In 2002, *Logging to Extinction* revealed that the government’s logging operation SBFEP had 59 approved or proposed cutblocks in spotted owl management areas with a volume of 492,746 cubic

meters.<sup>49</sup> By 2004 the number of cutblocks had increased to 108 with a volume of 602,773 cubic meters.<sup>50</sup>

BC’s Ministry of Forests describes BCTS’s core values as accountability, integrity, honesty and forest stewardship.<sup>51</sup> Why then has their logging expanded in endangered species habitat? As this report shows, BCTS is just a different name for doing the same as has always been done in BC – logging regardless of environmental costs.



BC Timber Sales clearcuts in a spotted owl Special Resource Management Zone in the heart of the Manning/Skagit Park complex.  
Photo: Joe Foy

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# Going, Going, Gone – Logging in Spotted Owl Sites since 2002

**Logging has occurred at all the following owl sites since *Logging to Extinction* was published in 2002. Below is a list of the forestry operations logging in spotted owl habitat.<sup>52</sup>**

Cattermole Timber Ltd. at Siwash Creek – owl status unknown, last detected in 2001.  
Ainsworth Lumber at Enterprise Creek – active pair of owls in 2005  
Ainsworth Lumber at Copper Creek – current owl site - male in 2005  
Ainsworth Lumber at Tenass Creek – owl status unknown - pair at Sockeye Creek about 6km away  
Ainsworth Lumber at Nesikep Creek – single owl in 2002, undetected since  
International Forest Products at Rogers Creek – owl last detected in 2004; not found in 2005<sup>53</sup>  
Teal Cedar Products and BCTS at Uztllus Creek - current owl site - single male owl  
Teal Cedar Products at Mowhokam – active in 2005 - single male owl  
Teal Cedar Products at Ainslie – owl last detected in 2000  
British Columbia Timber Sales and Doman at Spuzzum -- last detected in 2001  
British Columbia Timber Sales at Sunshine MAC – owl last detected in 2002  
British Columbia Timber Sales at Manning/Skagit spotted owl management area - owl status unknown - active pair about 3km away in 2005  
British Columbia Timber Sales at Kookapi Creek – owl last detected in 1997  
British Columbia Timber Sales at Tincup Creek – owl last detected in 1997  
British Columbia Timber Sales at Fire Creek – female owl last detected in 2004

## **Planned Logging at the following owl sites:**

Ainsworth Lumber at Copper Creek - planned timber harvest – active owl site in 2005  
Ainsworth Lumber at Enterprise - planned timber harvest – active owl site in 2005  
British Columbia Timber Sales at Billygoat - planned timber harvest – 3 active owl territories in 2005  
British Columbia Timber Sales at Fire Creek - planned timber harvest – active owl site in 2004  
British Columbia Timber Sales at Anderson Lake and Lost Valley - current owl site:  
(last detected in 1997 in Lost Valley and 2004 for Anderson Lake)  
Cattermole Timber Ltd at Anderson Creek - planned timber harvest - active owl site in 2003



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# Canada's Legal System – Species at Risk Falling through the Cracks

Endangered species have enough on their plate without worrying about Canada's Constitution.<sup>54</sup> Unfortunately, because it divides governing responsibility between the federal government and the provinces, the Constitution is a key factor in the survival of Canada's at risk species.

For example, because the Constitution grants power to the provinces to manage public lands and exploit natural resources, but fails to expressly assign responsibility for the environment, it creates "jurisdictional cracks" that species fall through.

The federal *Species At Risk Act* ("SARA"),<sup>55</sup> passed on June 5, 2003, epitomizes this concern. The last of three attempts to enact such legislation, SARA bears the scars of jurisdictional squabbles in that it defines federal authority as narrowly as possible to avoid stepping on provincial toes. This means automatic protections exist for species or their residence for only migratory birds and aquatic species, or species that reside on federal lands. Because more than 99% of BC's land base is under provincial jurisdiction, a majority of BC's at risk species fall under provincial control. A recent paper by a University of British Columbia professor describes why this is cause to be alarmed:

...the BC government has not sufficiently met its national and international obligations due to its low performance in the legal listing of scientifically recognized species at risk, a misconception of the purpose of species-at-risk legislation, arbitrary constraints on the protection of these species, and a lack of legal commitment to their recovery.<sup>56</sup>

Indeed, British Columbia is one of the only provinces in Canada without an endangered species protection law. While the province does maintain lists of species grouped according to their conservation risk,<sup>57</sup> this triggers no protection. Even though the province, since 1980, has

identified 138 "red-listed" animal species that are endangered or threatened, only four<sup>58</sup> were ever legally listed and entitled to the very marginal protections afforded by British Columbia's *Wildlife Act*.<sup>59</sup>

**...the BC government has not sufficiently met its national and international obligations due to its low performance in the legal listing of scientifically recognized species at risk, a misconception of the purpose of species-at-risk legislation, arbitrary constraints on the protection of these species, and a lack of legal commitment to their recovery.<sup>56</sup>**

In May 2004 the government introduced amendments to the *Wildlife Act*<sup>60</sup> to allow somewhat clearer authority for designating species as threatened, endangered or extirpated and to provide protections for species and their residence. But no species were listed and the amendments were not brought into force. In any event, the amendments maintain all the existing discretion of the current legislation and do not make any mandatory commitment to recovery planning or protecting habitat. In terms of the legal mandate needed to recover species, this law offers very little.



Anderson River  
Photo: Jeremy Sean Williams

That leaves the spotted owl with the *Forest and Range Practices Act*,<sup>61</sup> the Identified Wildlife Management Strategy and the Spotted Owl Management Plan.

The *Forest and Range Practices Act* is the BC government's initiative to deregulate the forest industry. Characterized as a move to "eliminate red tape" and give the forest industry more freedom, the legislation allows the British Columbia government to set "objectives" which must be met by the forest industry without specifying the exact method of doing so.

But regulations that set out the objectives are vague and identify continued logging as the priority. For example, the *Government Actions Regulation*<sup>62</sup> prevents the Ministry of Environment from establishing objectives to protect wildlife that would "unduly reduce the supply of timber from British Columbia's forests."

Protection is further circumscribed by the Identified Wildlife Management Strategy (IWMS), a policy to identify habitat for selected species, because it is subject to a one-percent maximum impact on timber supply. In the context of habitat protection being the key to species recovery, the flaws in IWMS are self-evident. Not surprisingly, the Forest Practices Board found IWMS largely inadequate in terms of protecting necessary habitat to assist species conservation.<sup>63</sup>

Unfortunately for the spotted owl, primary management of its habitat occurs pursuant to the Spotted Owl Management Plan (SOMP).

Described exhaustively in *Logging to Extinction*, the SOMP was an attempt to reduce the impact of spotted owl management on timber supply. Numerous features of the plan reveal that it was never intended to protect and recover the owl:<sup>64</sup>

- It permits logging and road building in core owl areas and limits owl protection measures to no more than 10% impact on logging;
- It is predicated on a planned decline in the Spotted Owl population (even though only 50 pairs were believed to exist when the plan was introduced);
- It permits logging in core owl habitat down to 67% of the gross forested land without scientific confirmation that this level of habitat will sustain owls;<sup>65</sup>
- It designates young forests as owl habitat without scientific confirmation that young forests are capable of sustaining owls;<sup>66</sup>
- It designated already logged or unsuitable "habitat" as suitable for owls;<sup>67</sup>
- It characterizes clear cuts as 'potential Spotted Owl habitat' despite the typical 60-100 year logging rotation that permanently precludes the utility of these areas to the owls;
- It relies on the premise that logging in old growth could benefit owls while acknowledging that this has not been proven scientifically; and,
- It relies on the notion that if core owl habitat is logged, owls will simply fly to new territory – a biologically indefensible concept given that habitat loss and fragmentation were and are known as a principle cause of juvenile and adult owl deaths.

The fate of the owl under the plan was foretold. In the only independent assessment of the SOMP conducted by biologists at the University of California in 1997, the authors concluded that implementation of the plan would

**“Environmental laws are almost always drafted in such a way as to give Canadian governments the power to take action...but no duty...transforming potentially effective laws and regulations into paper tigers.” David Boyd – Unnatural Law**

place “the spotted owl in British Columbia in the highest category of endangerment (“critical”), like white rhinos and Javan tigers.”<sup>68</sup>

Therefore, in terms of legal protection for the spotted owl, all that remains is the federal *Species at Risk Act*. Does this provide any hope? As introduced above, SARA places primary responsibility on the provinces to protect at-risk species. SARA does, however, grant the federal government discretion to protect species in provinces that fail to do so.<sup>69</sup> Of course, discretionary laws have enabled the federal government to intervene in provinces to protect the environment for over thirty years, but these provisions have never been used.<sup>70</sup>

Environmental groups are working to ensure that the federal government’s “do nothing” approach ends. In the spring of 2004, Sierra Legal Defence Fund, on behalf of the David Suzuki Foundation, ForestEthics, Sierra Club of Canada and the Western Canada Wilderness Committee, served the federal government with a petition asking it to apply SARA in BC to protect the spotted owl.

The initial response from the federal government was positive. In May of 2004, federal environment Minister David Anderson wrote BC’s Premier Gordon Campbell, stating, “I cannot shy

away from invoking the emergency order provisions of SARA where circumstances warrant.” Anderson also sought “a strong public position from the BC government for protecting the Spotted Owl and its habitat.”

But on February 15, 2005, David Anderson’s successor, Minister Stephane Dion wrote that the federal government was willing to wait until the BC government implemented a recovery strategy, even though the BC cabinet has withheld the recovery strategy for several years and ignored the Spotted Owl Recovery Team’s 2003 recommendation for a moratorium on logging.

But with the most recent surveys revealing 23 owls, environmentalists have decided to wait no longer, wishing to force the issue of the ongoing failure of the federal government to exercise its discretion to protect the environment. Concurrent with this report, Sierra Legal Defence Fund filed an application in federal court seeking orders that the federal minister of the environment recommend to the federal cabinet that SARA be invoked in BC.



Photo: Sharon Toochin

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# Conclusion

The story of the spotted owl in British Columbia is really a story about our old growth forests. Whether you call them a flagship species, umbrella species, indicator species, or simply “the canary in the coal mine,” the plight of the spotted owl tells us something about the forests in which they live. And the message is that there is something terribly out of balance in British Columbia’s old growth forests.

The story also reveals something out of balance in the halls of industry and government, where the penchant for logging appears to override science, ethics and reason.

This should concern us all. The spotted owl may be the first species in Canada to go extinct as a result of old growth logging but, without progressive change on the part of government and industry, it certainly will not be the last. Like dominoes, a host of forest-dependent at risk species are poised to topple. These include northern goshawks, Williamson’s sapsuckers, marbled murrelets, Townsend’s bats, fishers and mountain caribou, and the list goes on. And, at some point, the continued biodiversity decline may pose implications for all of us.

The final chapters of the spotted owl’s story remain unwritten. Will the court force the federal government to order that the *Species at Risk Act* apply in British Columbia? Will the BC government implement a recovery strategy that will actually protect the owl? Will the government’s own logging program, BC Timber Sales, embrace stewardship and withdraw, like its corporate predecessors, from spotted owl habitat? Will the 2010 Olympics occur in an environmentally friendly backdrop?

Or will these last remaining spotted owls simply die in BC’s heavily fragmented landscape, becoming Canada’s first logging related extinction?

We do not know. All we know is that we will not be silent witnesses to this ‘crisis of extinction.’



Photo: Wilderness Committee files

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# Recommendations

In *Logging to Extinction*, we made five recommendations for measures that must be undertaken to protect and recover the owl. These included immediate habitat protection, recovery team support, ministry staffing enhancement and provincial endangered species legislation. In the intervening period, these were largely ignored and the owl population subsequently dropped while logging continued. With this extinction crisis looming ever larger, the owl will need decisive action. We recommend:

- Halting all BCTS logging, and cancel all category “approved”, “proposed”, and “information” blocks of all BCTS and other forest licensees, in forest aged greater than 100 years, within the historic range of the spotted owl in BC, until such time as habitat and population modelling and expert opinion determine which forests are important for the recovery of the spotted owl, owl movement, dispersal, and protection of non-territorial single owls, throughout the historic range of the owl in BC.
- Implementing adequate habitat protection for the spotted owl by halting all logging in all forests greater than 140 years of age in the historic range of the owl in BC.
- Implementing a moratorium on logging in all forests between 100-140 years of age and under 1000 meters in elevation until such time as habitat and population modelling and expert opinion identify stands important to protect for owl dispersal and movement throughout the historic range of the owl in BC.
- Creating three large, interconnected protected area complexes capable of housing 30 pairs of owls each.
- Creating 3,200 ha of protected contiguous high quality spotted owl habitat, aged greater than 140 years, at each of the historic and current owl locations in BC.
- Recruiting and protecting habitat through time from the working forest land-base to create interconnected pockets of habitat, less than 1000 metres elevation, at least 140 years in age, and 500-2000 ha in size, throughout the historic range of the owl in BC, particularly in theoretically capable owl movement corridors.
- Implementing population augmentation as determined by the Canadian Spotted Owl Recovery Team.
- Developing an independent, non-government, academic peer-review process to analyze the effectiveness of habitat protection and population augmentation and all other spotted owl management actions.
- Immediately creating strong stand-alone provincial endangered species legislation that mandates habitat protection, adequate for full recovery, of all species at risk in BC.
- Returning staffing to pre 2001 levels for all ministries involved with the management of species at risk and their habitat.

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# Assessment Methodology

For the purpose of the investigation into current threats to critical spotted owl habitat by the BC Timber Sales program, critical spotted owl habitat was defined as forest greater than 120 years of age found in and around mapped Special Resource Management Zones (Management Zones) or Matrix Activity Centres (Activity Centres).

Management Zones and Activity Centres are areas that were designed for the protection of spotted owl habitat by the Spotted Owl Management Plan (Management Plan) in 1997. The Management Plan anticipated that forest practices would take place with the Management Zones and Activity Centres, but that they would be restricted to “creating, enhancing or maintaining a sufficient quality and quantity of suitable owl habitat.”

In 2002 Forest Watch of BC, Sierra Legal Defence Fund and the Western Canada Wilderness Committee released a report, *Logging to Extinction: The Last Stand of the Spotted Owl in Canada*, which chronicled the owls’ rapid decline in British Columbia over the last 20 years, and identified the top ten forestry companies logging in critical owl habitat and the top ten foresters approving logging in critical owl habitat.

This report, which is a follow-up to *Logging to Extinction*, identifies threats to critical spotted owl habitat as “approved” or “proposed” logging of forests greater than 120 years of age, including “information” cutblocks found inside, or within 500 meters of Management Zones and Activity Centres. Unlike the previous report this report only examines the expanded logging operations of the provincial government’s BC Timber Sales program (formerly the BC government’s Small Business Forest Enterprise program) in critical spotted owl habitat.

The findings in this report were derived from information in approved Forest Development Plan (FDP) maps and accompanying timber harvest summary tables. Where timber harvest summary tables were incomplete or unavailable, the information utilized in this investigation represents educated estimates based upon information available in the FDPs.

## *Chilliwack Forest District*

On Wednesday and Thursday, July 18-19, 2004 Devon Page, staff lawyer (Sierra Legal), Aran O’Carroll, LLB, Gwen Barlee, policy director, (Wilderness Committee) Louise Askjaer Pederson, researcher, (Wilderness Committee), Geoff Senichenko, mapping technician, (Wilderness Committee) and Andy Miller, Msc., spotted owl biologist, attended at the Chilliwack Forest District Office. This visit was prearranged with the District Office who supplied the entire district’s current consolidated FDPs, which were reviewed by the above mentioned parties.

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# Mapping Methodology

The study area for the spotted owl mapping and analyses are the British Columbia Ministry of Forests Squamish, Chilliwack and the southern part of the Lillooet Forest Districts. All maps are based on Ministry of Forest forest cover data for Squamish, Chilliwack and Lillooet Forest Districts, forest cover data for the Greater Vancouver Regional District Watershed and forest cover data of Tree Farm Licence #38. Baseline thematic mapping data was also used to determine the extent of forest cover for Golden Ears Park, Tree Farm Licence #26, and in addition, Biogeoclimatic ecosystem classification (BEC) mapping data was used for Manning Park.

## *Map 1. Estimated Historic Spotted Owl Habitat in Canada*

Baseline thematic mapping data, showing young forests, old forests and urban/agricultural lands all under 1000m, were used to illustrate a rough estimate of potential historic spotted owl habitat within the Squamish, Chilliwack and southern portion of Lillooet Forest Districts. This map does not show historical natural disturbances, nor small areas that were historically non-forested within present urban/agricultural lands.

## *Map 2. Remaining Spotted Owl Habitat Mapping*

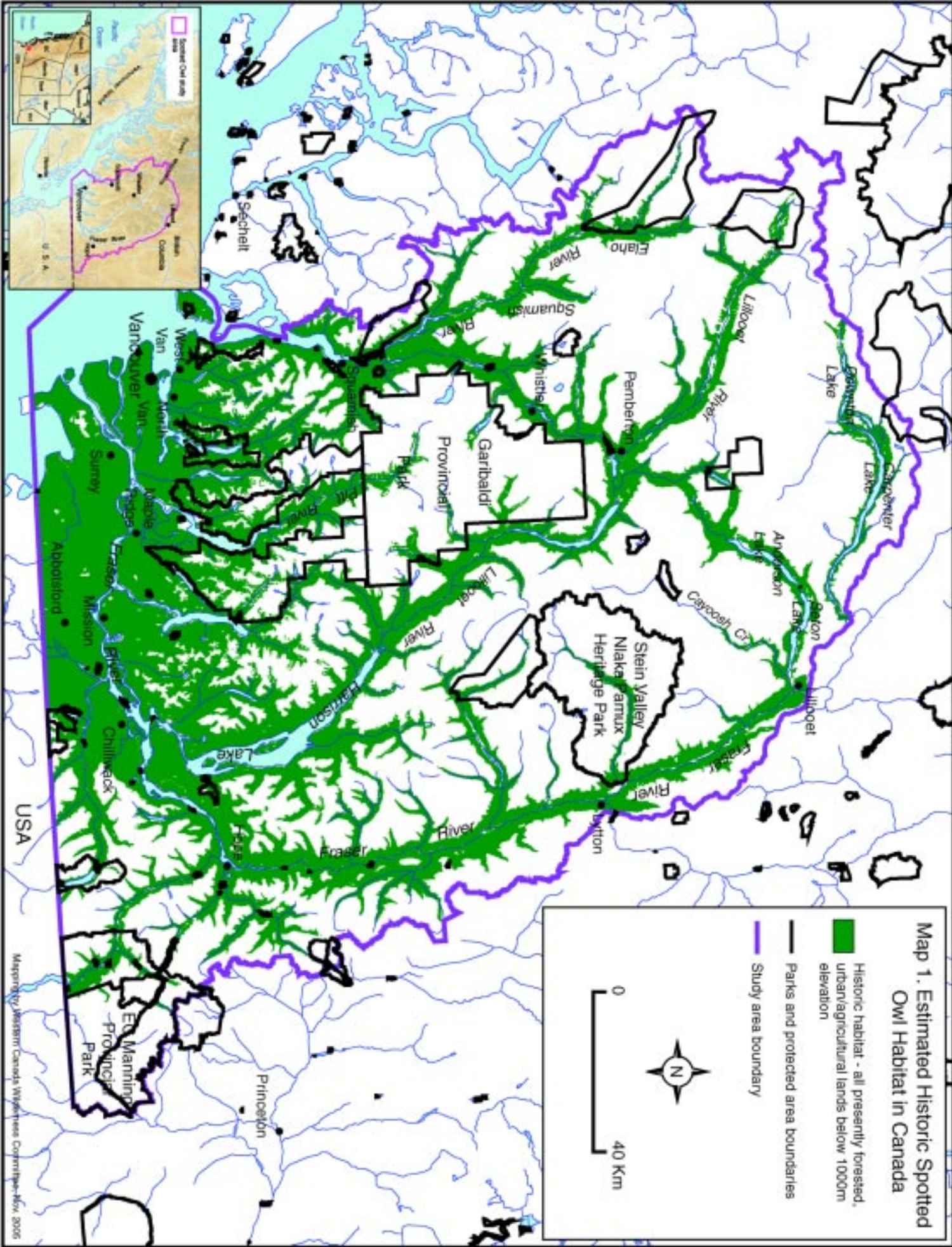
Forest age class 8-9 (greater than 140 years), with a height class > 2 (taller than 19.3 metres), below 1000 metres elevation were isolated and used to illustrate the current highest quality spotted owl habitat within the Squamish, Chilliwack and southern portion of Lillooet Forest Districts. Similarly, Forest age class 6-7 (101 - 140 years), with a height class > 2 (taller than 19.3 metres), below 1000 metres elevation were also isolated and used to illustrate the current moderate quality spotted owl habitat available in the study area.

# Habitat Statistics

Area of estimated historic spotted owl habitat in Canada (from map 1): 1,130,438 hectares

Area of remaining spotted owl habitat in Canada (from map 2):

All remaining high quality habitat:	290,713 hectares
All remaining lower quality habitat:	82,509 hectares
Total remaining habitat:	373,223 hectares
Remaining high quality habitat outside protected areas:	226,866 hectares
Remaining lower quality habitat outside protected areas:	68,061 hectares
Total remaining habitat outside protected areas:	294,927 hectares

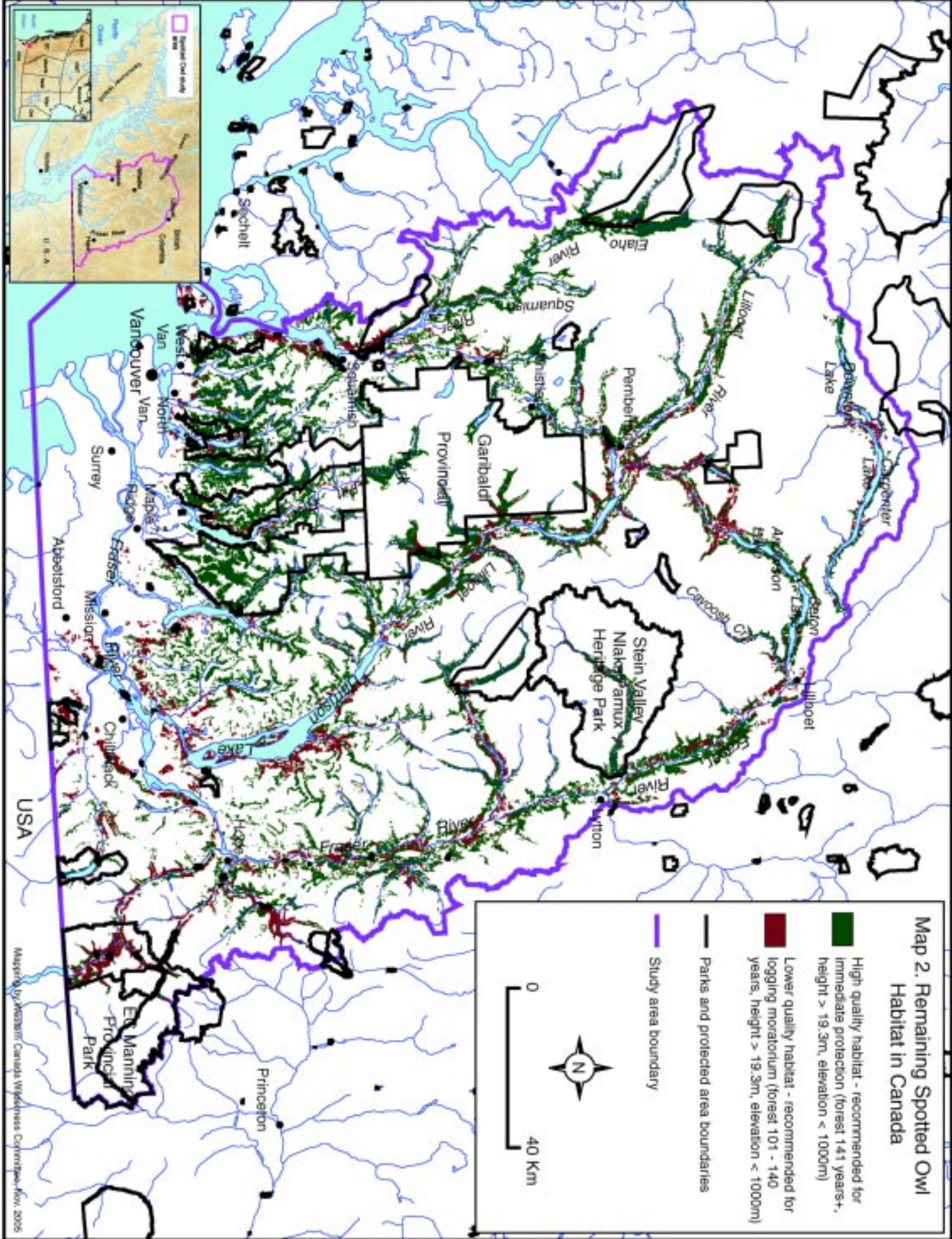


**Map 1. Estimated Historic Spotted Owl Habitat in Canada**

- Historic habitat - all presently forested, urban/agricultural lands below 1000m elevation
- Parks and protected area boundaries
- Study area boundary

0 40 Km





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# Notes

<sup>1</sup> Baron, Ethan, “Eco group pooh-poohs plan to breed owls in captivity” *Vancouver Province*, November 4, 2005, A 25

<sup>2</sup> *Species At Risk Act*, 2002, c. 29

<sup>3</sup> *Western Canada Wilderness v. Cindy Stern et al*, [2002] B.C.J. No. 2036, 2002 BCSC 1260, (2002) 45 Admin. L.R. (3d) 161, (2002) 50 C.E.L.R. (N.S.) affirmed: *Western Canada Wilderness v. Cindy Stern et al*, [2003] B.C.J. No. 1581, 2003 BCCA 403, (2003) 15 B.C.L.R. (4th) 229, (2003) 1 Admin. L.R. (4th) 167, (2003) 1 C.E.L.R. (3d) 185

<sup>4</sup> Vancouver 2010, Bid Book – Theme 4, s. 4.2, p. 4 (2002)

<sup>5</sup> Vancouver 2010, Bid Book – Introduction, p. 5 (2002)

<sup>6</sup> According to the British Columbia Ministry of Environment BC has 1,362 blue and red listed species at risk in the province. Red listed species are extirpated, endangered or threatened. Blue listed species are of special concern. This list includes plants.

<sup>7</sup> Correspondence dated May 10, 2002 from Gordon Campbell, British Columbia Premier, to Joe Foy, National Campaign Director, Western Canada Wilderness Committee, British Columbia

<sup>8</sup> Ministry of Agriculture and Lands, Species at Risk - Coordination of Species at Risk, British Columbia, (see <http://ilmbwww.gov.bc.ca/ilmb/sarco/sarco.html>)

<sup>9</sup> Ministry of Agriculture and Lands, Service Plan Update 2005/06 – 2007/08, (Victoria BC, Ministry of Agriculture and Lands, September 2005) p. 35

<sup>10</sup> “Initiatives for the Conservation of Biodiversity in British Columbia,” (Victoria BC, Queens Printer, 1996) p. 12,

<sup>11</sup> Blackburn, I. et al, “Population Assessment of the Northern Spotted Owl in British Columbia 1992-2001” (Vancouver, Ministry of Water, Land and Air Protection, 2002)

<sup>12</sup> Blackburn, I. et al, “Supplement to the Population Assessment of the Northern Spotted Owl in British Columbia 1992-2001” (Vancouver, Ministry of Water, Land and Air Protection, 2002)

<sup>13</sup> According to the Ministry of Forests Website, FIA is a taxpayer-derived fund which provides funding to forest sector associations, researchers, tenure holders,

manufacturers, and government agencies (see <http://www.for.gov.bc.ca/hcp/fia/>)

<sup>14</sup> Copy of correspondence dated December 22, 2003 from Myke Chutter, SORT Chair, to Nancy Wilkin, Assistant Deputy Minister, and Larry Pederson, Chief Forester, British Columbia

<sup>15</sup> Lavoie, Judith, “Province Called ‘Backwards’ in Protecting Endangered Species” *Victoria Times Colonist*, March 4, 2005

<sup>16</sup> Forest Practices Board “Provincial Systems Fail to Protect Threatened Species” Media Release, March 3, 2005

<sup>17</sup> Fraser, Bruce, Letter, “Government Response to Board’s Recommendations, Brandt Valley Complaint 000242” Forest Practices Board, February 21, 2005

<sup>18</sup> Lavoie, Judith. “Province Called ‘Backwards’ in Protecting Endangered species” *Victoria Times Colonist*, March 4, 2005

<sup>19</sup> Forest Practices Board “BC’s Mountain Caribou: Last Chance for Conservation?” Special Report, September, 2004

<sup>20</sup> British Columbia, Ministry of Forests “BC Heartlands Economic Strategy – Forests” Pamphlet, 2002 p. 8

<sup>21</sup> West Coast Environmental Law “Please Hold Somebody Will Be Right With You” Report, 2004 p. 11

<sup>22</sup> Sierra Club of Canada, BC Chapter “Axing the Forest Service” Report, November, 2004 p.5

<sup>23</sup> West Coast Environmental Law “Please Hold Somebody Will Be Right With You” Report, 2004 p. 11

<sup>24</sup> Forest Practices Board “Provincial Systems Fail to Protect Endangered Species.” Press Release, March 3, 2005 (see <http://www.fpb.gov.bc.ca/news/releases/2005/03-03.htm>)

<sup>25</sup> Sierra Club of Canada, BC Chapter “Axing the Forest Service” Report, November, 2004 p. 5

<sup>26</sup> *Ibid*

<sup>27</sup> Mickleburgh, Rod. “Forest Firm to stop all logging in spotted owls’ BC territory” *Globe and Mail*, October 14, 2002 A3

<sup>28</sup> Hamilton, Gordon. “Thousands Face Job Losses as Victoria Reallocates Timber” *Vancouver Sun*, February

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19, 2004.

<sup>29</sup> “Interfor, Province reach agreement on compensation for timber reallocation” International Forest Products Press Release, Vancouver, BC, March 28, 2005

<sup>30</sup> “Province, Canfor reach timber reallocation agreement.” BC Government press release, Victoria, BC October 28, 2005

<sup>31</sup> Blackburn, I.R., 1991. The distribution, habitat selection and status of the Northern Spotted Owl in southwestern British Columbia, 1991. Unpublished report, BC Ministry of Environment, Lands and Parks, Wildlife Branch, Surrey, BC.

<sup>32</sup> Dunbar, D. and I. Blackburn, 1994. Management options for the Northern Spotted Owl in British Columbia. Report of the Canadian Spotted Owl Recovery Team. BC Ministry of Environment, Lands and Parks, Surrey, BC.

<sup>33</sup> Blackburn, I.R. and S. Godwin, 2003. Status of the Northern Spotted Owl in British Columbia. Ministry of Water, Land and Air Protection, Surrey, BC.

<sup>34</sup> Chutter, M. et al. Spotted Owl Recovery Strategy October. 2004

<sup>35</sup> Courtney et al, 2004

<sup>36</sup> Pojar, J. and A. MacKinnon (eds.), 1994. Plants of the Pacific Northwest Coast. Vancouver, BC: Lone Pine.

<sup>37</sup> *114957 Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)*, [2001] S.C.J. No. 42 at para 31 (Q.L.)

<sup>38</sup> Yzerniac, Moola, 2004 “*Conservation status and threats to species associated with spotted owls: a new flagship fleet for British Columbia*” in press.

<sup>39</sup> Correspondence dated February 24<sup>th</sup>, 2004 from Faisal Moola, David Suzuki Foundation to Devon Page, Sierra Legal Defence Fund

<sup>40</sup> Thomas et al. 1993

<sup>41</sup> The Spotted Owl Management Plan limited the impact of measures to address spotted owls to “no more than approximately 10% reduction in long term timber supply” - Spotted Owl Management Plan – Strategic Component (Victoria: Province of British Columbia, November 1997), pp.2

<sup>42</sup> Hanson, E., D. Hays, L. Hicks, L. Young and J. Buchanan, 1993. Spotted owl habitat in Washington. Washington Forest Practices Board. Washington.

<sup>43</sup> Hodum, P. and S. Harrison, 1997. “Ecological Assessment of British Columbia Spotted Owl Management Plan” (California: University of California, 1997)

<sup>44</sup> Noon, B., and K. McKelvey, 1996, “Management of the spotted owl: a case history in conservation biology” Annual review of ecological systems 27 pp. 135-62.

<sup>45</sup> Forsman, pers comm. 2002, Hodum, 1997. Hodum, P. and S. Harrison, 1997. “Ecological Assessment of British Columbia Spotted Owl Management Plan” (California: University of California, 1997)

<sup>46</sup> Franklin, A.B., K.P. Burnham, G.C. White, R.G. Anthony, E.D. Forsman, C. Schwarz, J.D. Nichols and J. Hines, 1999. Range-wide status and trend in Northern Spotted Owl populations. Unpublished Report. Colorado State University and Oregon State University, Fort Collins, CO.

<sup>47</sup> Forsman, E. D., J.A. Reid, S. Graham, J.S. Mowdy and A.L. Price, 2002. Demographic characteristics of Northern Spotted Owls (*Strix occidentalis*) on the Tyeey Study Area, Roseburg, Oregon: 1985-2002. Unpublished Report for wildlife habitat relationships in Washington and Oregon. USDA Forest Service.

<sup>48</sup> Seattle Post Intelligencer, Sunday, August 24, 2003. Section F-1-V

<sup>49</sup> Forest Watch of British Columbia, et al., “Logging to Extinction – The Last Stand of the Spotted Owl in Canada” Report, September, 2002 p. 42

<sup>50</sup> In July 2004 staff from the Western Canada Wilderness Committee and Sierra Legal Defence Fund and Aran O’Carroll, formerly of Forest Watch of British Columbia, appraised forest development maps at the Chilliwack Forest District Office. The maps revealed that British Columbia Timber Sales, formerly the Small Business Forest Enterprise Program, had increased logging in spotted owl management areas. In the appraisal threats to spotted owl habitat were defined as proposed or approved logging in forests of age class 7, 8 and 9, including “information” cutblocks found inside of within 500 meters of Special Resource Management Zones (SRMZs) or Matrix Activity Centres (MACs) as delineated in the Spotted Owl

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Management Plan for the protection of spotted owl habitat.

<sup>51</sup> British Columbia. Ministry of Forests. “BC Timber Sales Business Plan - 2005/06 to 2007/08.” (see <http://www.for.gov.bc.ca/bcts/about/bctsplan.pdf>) p. 3, April 2005.

<sup>52</sup> International Forest Products (Interfor) put a temporary logging moratorium on all logging in protected spotted owl areas in special resource management zones (SRMZs) and matrix activity centres (MACs) after the release of *Logging to Extinction* in 2002. However they continued to log in unprotected spotted owl habitat outside of these areas. Rogers Creek is an active spotted owl area that Interfor logged since 2002.

<sup>53</sup> Andy Miller, as a member of the Spotted Owl Recovery Team from 2002-2004, obtained spotted owl detection data. This data was cross referenced with Forest Development Plans to generate the list of owl sites that have been logged since 2002.

<sup>54</sup> The Constitution Act, 1867(U.K.) 30 & 31 Victoria, c. 3.

<sup>55</sup> *Species At Risk Act*, 2002, c. 29

<sup>56</sup> Wood, P.M. and L. Flahr, “Taking endangered species seriously? British Columbia’s species-at-risk policies” *Canadian public policy* 30 (4, 2004) pp. 381-399

<sup>57</sup> “Red” list species are considered endangered, threatened, or extirpated. “Blue” list species are those of special concern

<sup>58</sup> Burrowing owl, white pelican, sea otter and Vancouver Island marmot

<sup>59</sup> *Wildlife Act*, R.S.B.C. 1996 c.488

<sup>60</sup> *Wildlife Amendment Act, 2004*, SBC 2004 Chapter 56 — Bill 51

<sup>61</sup> *The Forest and Range Practices Act*, S.B.C.2002, C.69

<sup>62</sup> Government Actions Regulation (BC Reg. 17/04)

<sup>63</sup> British Columbia Forest Practices Board, “BC’s Mountain Caribou: Last Chance for Conservation?” (Victoria: British Columbia Forest Practices Board, 2004)

<sup>64</sup> Spotted Owl Management Plan – Strategic Component (Victoria: Province of British Columbia, November 1997), pp. 1, 2, 60, 61

<sup>65</sup> As well, at the time SOMP was implemented, approximately only 50% of the forests were suitable for owls. Even though much of the entire forested area was below 67% suitable habitat, individual areas were logged to 67%.

<sup>66</sup> Specifically, the Management Plan advised that the minimum forest age suitable for owl habitat was not 140 years old but 100 old years, even though the SOMP acknowledged that Spotted Owl has never been confirmed in forests less than 120 years of age.

<sup>67</sup> For example, the BC government said the plan area was 363,000 hectares - 159,000 of which was in parks and protected areas and 204,000 hectares in “managed” zones. But, of the 204,000 ha, only 70,000 ha were explicitly protected for Spotted Owls as a result of the plan. The remaining 144,000 hectares were already cut, were entitled to be cut to the 67% threshold, were too young to constitute owl habitat or were too high in elevation to be of use to owls.

<sup>68</sup> Hodum, P. and S. Harrison, “Ecological Assessment of the British Columbia Spotted Owl Management Plan” (California: University of California, 1997) p.10

<sup>69</sup> Under sections 34 and 80, the federal minister can recommend that the federal Cabinet order that SARA apply in a province if of the opinion that the laws of a province do not provide effective protection or there are imminent threats to survival or recovery of a species. Of course, Cabinet can decline.

<sup>70</sup> D.R. Boyd, *Unnatural Law* (Vancouver: UBC Press, 2003) p. 232.