February 18, 2020



Public Input Coordinator Species Conservation Policy Branch - Wildlife Section 300 Water Street 5th Floor, North tower Peterborough, ON K9J 3C7

Via email: wildlifepolicy@ontario.ca

#### Re: Proposed changes to black bear hunting regulations, ERO#019-1112

To whom it may concern:

We are submitting this letter in our respective capacities as scientists on behalf of Wildlife Conservation Society Canada (<u>www.wcscanada.org</u>), where we have been operating field studies in northern Ontario since 2002. In addition to research activities in this province, we have been involved in both the development and implementation of Ontario policy and legislation on fish and wildlife (including game species) and species at risk. Several of us have particular experience and expertise in large mammals in general, and bears in particular.

Following our assessment of the proposal and available harvest information, and based on our understanding of bear biology and familiarity with published research in Ontario, including the 2003 Nuisance report and subsequent publications, we strongly recommend that this action be postponed until the end of the 5-year pilot and when the full set of information becomes available from both harvest statistics and the black bear population research being led by OMNRF. This information should serve as the basis of formulation of quotas and a robust management system for black bear harvest. Such an action would qualify as a decision that would bring long-term stability to hunters and the tourism industry and would support an informed decision at this stage.

Although the economic benefits from hunting bears are high, this will be irrelevant if the harvest is not sustainable. The provision of "socio-economic benefits" of black bear hunting is but one objective in the Framework for Enhanced Black Bear Management in Ontario, with the first objective being to maintain a sustainable black bear harvest in Ontario<sup>1</sup>. The OMNRF website<sup>2</sup> acknowledges the well-documented vulnerability of black bears to being over-harvested, given their life history characteristics and the fact that hunting is the largest cause of black bear mortality. The website also states that "their harvest must be managed carefully" to ensure a viable black bear population. In addition, it discusses the diversity of viewpoints of Ontarians on the status of bear populations and how these should influence management

<sup>&</sup>lt;sup>1</sup> <u>https://www.ontario.ca/page/black-bear-management-framework#section-6</u>

<sup>&</sup>lt;sup>2</sup> https://www.ontario.ca/page/black-bear-management-background?\_ga=2.74561809.2075357439.1581874679-1028266960.1568148727

decisions. All this underscores how important it is for Ontario's black bear harvest management regime to be transparent and evidence-based to enable public confidence. Instead, the proposals outlined in this ERO notice are indicative of actions that are unsupported by evidence, and have a high probability of incurring important longer-term consequences (i.e., reduced black bear populations and opportunities for hunting).

We outline the reasons for our concerns in this submission, followed by a set of recommendations.

## 1) Proposal to implement a regular spring black bear season

- We recommend continuing the pilot spring bear hunt through to its conclusion in spring 2021;
- We recommend waiting to implement a regular spring bear hunt until the results of the 2021 harvest statistics and the 2018-2020 survey information are available and can be directly applied towards managing the harvest, i.e., by instating quotas in WMUs where black bear population health demonstrate some signs of concern.

Ontario's proposal to implement a regular spring bear hunt is occurring only three years after the initiation of a five-year pilot and is based on a woefully incomplete basis of information to ensure its sustainability. The pilot black bear spring season, covering all 88 WMUs, was only initiated in 2016<sup>3</sup>, after being extended from 8 WMUs in 2014. Although the 2016 pilot was meant to be five years in length, only three years of harvest data are available (2016-2018). Moreover, the monitoring and research that was to accompany the pilot has not yet been completed. Funding for three years of widespread non-invasive sampling of black bears in WMUs across the province to inform black bear harvest management objectives only commenced in 2018, and data are still being collected and analyzed. The latest information on the OMNRF website regarding black bear status in the province is from 2007, and the Black Bear Management Framework on the OMNRF website is based on documentation that is over a decade old<sup>4</sup> and has not been modified since the initiation of the pilot spring bear hunt.

The information that is publicly available suggests some cause for concern about the sustainability of the hunt in the absence of recent black bear population data. The number of resident and non-resident hunters who purchased tags and estimated ("projected") harvest each year have increased substantially since 2014 and 2016, the two phases of the pilot. Most of this increase is due to resident hunters (Figure 1), although non-resident hunter numbers are still consequential as they have higher success rates, given the requirement to hunt with licensed guides. Comparing the three-year period since the initiation of the full pilot in 2016 (2016-2018; gray bar in figure 1) against three years prior to the first pilot in 2014 (2011-2013;

<sup>3</sup> <u>https://www.ebr.gov.on.ca/ERS-WEB-xternal/displaynoticecontent.do?noticeId=MTI2MzQ1&statusId=MTkwNjk4</u>

<sup>4</sup> Although the management framework and backgrounder webpages on the OMNRF website are un-dated, the identical language appears in two 2009 OMNRF reports available on the website of the Ontario Federation of Anglers and Hunters https://www.ofah.org/fishing-hunting/hunting/bear/resources/

green bar), the average annual harvest increased by 35% from to 5,056 to 6,820, and the average number of hunters increased by 41% from 20,702 to 29,128.

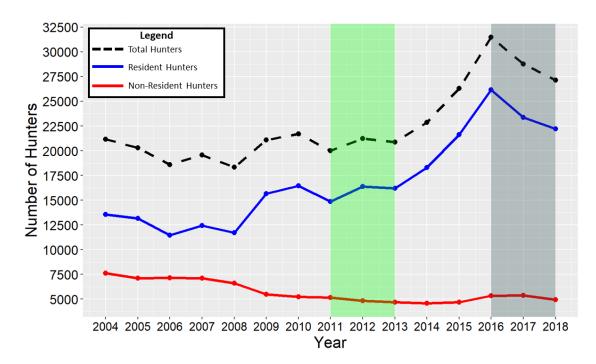


Figure 1. Number of non-resident, resident, and total bear hunters per year, 2004-2018.

To provide perspective to these statistics, from 1999 (when the spring bear hunt was cancelled) to 2007, an annual average of 5,253 bears were harvested, with an estimated 6,204 bears harvested in 2007. Prior to the spring bear hunt cancellation, between 1990 and 1998, an average of 6,783 bears were harvested annually by hunters across Ontario. Although this is a similar number to estimated harvest intake today, other circumstances for black bears in the province have changed, at least in some areas, since two decades ago. While hunting remains the highest source of mortality, there are additional pressures affecting population dynamics today, such as variation in food availability (exacerbated by a changing climate), and loss of habitat quality and quantity in some areas.

Another factor to consider is that black bear harvest is not evenly distributed across bear range (Figure 2), ranging from few than 100 to over 5,000 black bears taken between 2004-2018. The harvest effort is clearly not consistent in some parts of the province.

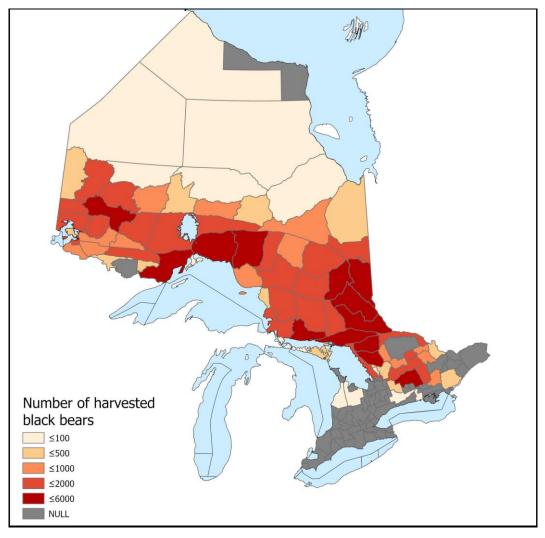
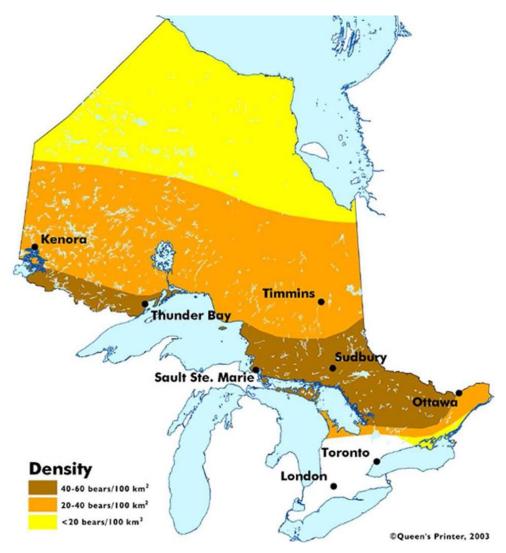


Figure 2. Total estimated harvest black bears in Ontario, 2004-2018.

As described on OMNRF's "black bear management background" website, Ontario only has a rough idea of the densities of black bears across the province (Figure 3); this information has not been updated since 2003. Given the variability in harvest rate across different WMUs, it is particularly important to understand local and geographic-specific context for population trends, especially in those WMUs that are subjected to the heaviest harvesting pressure. This is precisely the type of information the ongoing OMNRF-led research is meant to provide to support decision-making, but has not yet been completed, let alone applied.



**Figure 3.** Estimated black bear distribution and density in Ontario (Figure 1 from Black bear management background website<sup>5</sup>, Ontario Ministry of Natural Resources and Forestry)

Ensuring for the long-time sustainability of black bear hunting in the absence of any current population data is a major challenge, and the ERO notice is not forthcoming about the fact that such information is currently largely unavailable, and that harvest pressures have increased since the reinstatement of the spring bear hunt within only a three-year period. In fact, even with a significant change to harvest, there is no sign of any intention by the province to make any adjustments to the management system that has been in place since 2009.

In addition to the weak information base at the root of this proposal and our resultant concerns about the sustainability of the proposed harvest, we stress the importance of tracking food availability information, necessary for management decisions. <u>Both population status and human bear conflicts are directly related to food availability, and these, in turn, have important</u>

<sup>&</sup>lt;sup>5</sup> <u>https://www.ontario.ca/page/black-bear-management-background?</u> ga=2.207436182.465422193.1581364834-1478202425.1534269041

<u>consequences for bear harvest management</u>. These are highly important for a mammal that needs to hibernate 4-6 months of the year and, in the case of females, is also giving birth and lactating in dens. Variation in food availability obscures trends and may also confound tests for relationships among black bear population size, hunting pressure, harvest, and human- bear conflicts (both perceived and reported).

Concurrent data on food availability are necessary to understand black bear population dynamics. In Ontario, examples of how variations in food availability, particularly of berries and other vegetation, have affected black bear population dynamics and movements include:

- 2-4 week delays in 2000, 2004, and 2008 summer berry crops due to cool, wet weather
- total failure of summer and fall mast crops in southern Ontario due to a severe (1 in 100-year) mid-summer drought;
- Hottest summer on record and low precipitation in many areas of Ontario during 2005, including 1 in 50-year droughts;
- Drought conditions in northwestern Ontario in 2006 and in areas of northeastern and southern Ontario in 2007;
- In addition, there are important ecological differences across ecoregions and ecozones that are also affected by climate change.

### 2) Proposal to address Bruce Peninsula black bear population concerns

# We recommend that the harvest season in the WMUs 82A, 83, and 84 be closed until populations have recovered.

As indicated in this ERO proposal and several publications that have been out for years, there is significant reason for concern about the welfare of the Bruce Peninsula population in particular. <u>Unlike many other places in the province, the status of this population and the biological evidence is clear; the population is small and declining.</u> The proposed management response is a shortened season, but still without any harvest quota, which means the final actual harvest number is cannot be predicted. Yet recent information suggests that there is high hunter interest, so how will OMNRF manage harvest pressure? Harvest statistics from the last several years indicate that while many bear tags have been issued, the vast majority have gone to resident hunters, meaning the economic fall-out from ceasing the hunt for the time being would be relatively low.

### 3) Updates to black bear regulations to improve fairness

# We recommend that plans to use harvest management as a means to address human-black bear conflict be abandoned.

We consider the proposal to remove the exemptions from non-residents required to hunt through a licensed bear operator as inconsequential, as this would affect <2% of non-resident bear hunters.

We are, however, <u>highly concerned</u> about the stated intention to "explore enhanced harvest management approaches/systems to help address black bear management challenges and

stakeholder concerns", which is also included in the notice as a "minor update". <u>Empirical</u> <u>support for the assumption that increased harvest should reduce bear conflicts is lacking</u> <u>despite considerable research, and Ontario should be bold about ensuring this reality remains</u> <u>front and centre in policy decisions in the context of this politically-charged issue</u>.

Black bears can, of course, cause property and crop damage as well as concerns for human safety. Although the ERO notice did not itself refer to human bear conflict as a reason for reinstating the spring bear hunt, we are aware of many voices in the province seeking to justify increased numbers of licences for black bears and more liberal seasons as a means to resolve human-bear conflict. We take the opportunity here to stress that the Ontario government's own scientists have examined this issue in robust fashion, and that the accumulated body of research<sup>6</sup> remains highly relevant for current decision-making. Though it is difficult to infer causal relationships from correlation analyses, these findings corroborate previous studies that have demonstrated negative relationships between the frequency of conflict between humans and black bears and fruit or nut production by preferred forage species. Where humans coexist with established bear populations, annual variation in the frequency of human bear conflicts is apparently well-explained by variation in food supply for bears. Promising to engage on this issue, as stated in this ERO notice, is a step in the wrong direction.

### 4) Regulatory Impact Statement

The ERO notices downplays environmental, social and economic consequences of this proposal.

We have provided some detail in this submission regarding potential negative consequences to the sustainability of an increased harvest of black bears in the province. The first three years of the pilot have already demonstrated a substantial increase in number of hunters during this period, but there is no evidence for the province's confidence that maintaining this hunt will have no population-level consequences for black bears. The case of the Bruce Peninsula population is put forward in the ERO notice as evidence for OMNRF addressing concerns about local populations, but we simply do not know whether there are other areas in the province with declining black bear populations. The data on black bear population health being assembled and analyzed right now from elsewhere in the province is not available to inform harvest management.

The notice commits a major oversight by neglecting to mention myriad social concerns among the general population about matters surrounding the spring bear hunt that are well documented in the 2003 Nuisance Bear report. In particular, there is a failure to mention ethical considerations that have been voiced by many on this issue, including cub orphaning, bear baiting, use of dogs, etc.

Finally, evidence of economic benefit should be provided to back up the claims in the notice that this will be neutral to positive. We find the expressed motivation for this proposal to

<sup>&</sup>lt;sup>6</sup> e.g., Obbard, ME et al. (2014) Relationships among food availability, harvest, and human-bear conflict at the landscape scales in Ontario, Canada *Ursus* 25: 98-110; Poulin, R., J. Knight, M. Obbard, And G. Whitherspoon, editors. (2003) Nuisance bear review committee report and recommendations. Ontario Ministry of Natural Resources, Peterborough, Ontario.

provide certainty to licensed operators somewhat baffling, as waiting for the full five years of the pilot and associated research would also bring certainty to the same businesses and better ensure the long-term sustainability of the harvest.

#### **Conclusions and recommendations**

The news release<sup>7</sup> issued by MNRF to announce this ERO notice claimed that implementing a regular spring black bear season was a step to "ensure a healthy and sustainable black bear population" and that promoting "sustainable hunting" was about "protecting black bears." A sustainable harvest requires a long-term perspective with management actions that are evidence-based, accompanied by careful research, monitoring, and adaptive management. There is no evidence that these elements are currently in place for managing black bears in Ontario. Instead, the province is initiating a premature end to a pilot initiative, prior to important survey information about bear population health becoming available, and relying on a management "framework" to govern this action that is already over a decade old.

Accordingly, we have the following recommendations:

- 1) Continue the pilot spring bear hunt through to its conclusion in spring 2021;
- 2) Wait to implement a regular spring bear hunt until the 2021 harvest statistics and the 2018-2020 survey information results are available and applied to manage the harvest, i.e., by instating quotas in WMUs where black bear population health demonstrates some signs of concern;
- 3) Close the Bruce Peninsula spring and fall hunts in WMUs 82A, 83, and 84 altogether, with an aim to revisit the decision with the availability of new information;
- 4) Abandon plans to use harvest management as a means to address human-black bear conflict, in keeping with best available science; and
- 5) Replace the current outdated black bear "management framework" with a robust and comprehensive black bear management plan for the province that follows the best available information, knowledge, and experience from Ontario and elsewhere, addresses harvest together with bear conflict management that is preventative in nature, includes aspects like public education and a bait management strategy, and draws on expertise from other jurisdictions, e.g., Alberta<sup>8</sup>.

 <sup>&</sup>lt;sup>7</sup> https://news.ontario.ca/mnr/en/2020/01/ontario-consults-on-annual-spring-bear-hunt.html
<sup>8</sup> https://open.alberta.ca/dataset/3274cf4f-3cd5-430a-9a6b-20813737642f/resource/79507b50-af50-4b1a-bfcb-00ff614f4fc2/download/2016-managementplan-blackbear-jan2016.pdf

Thank you again for the opportunity and we welcome further discussions of any of the points we have raised here.

Sincerely,

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