

January 30, 2017

Wildlife Section  
PUBLIC INPUT COORDINATOR  
Ministry of Natural Resources and Forestry  
Policy Division  
Species Conservation Policy Branch  
300 Water Street  
Peterborough Ontario  
K9J 8M5

Ladies and Gentlemen,

**RE: EBR Registry #012-9170 and #012-9169 - Snapping Turtle (*Chelydra serpentina*) and Bullfrog (*Lithobates catesbeianus*) harvest**

We the undersigned organizations strongly oppose the Ministry of Natural Resources and Forestry's proposal to continue to allow the hunting of snapping turtles and bullfrogs in Ontario. The proposal is contrary to the recommendations of species experts (e.g., the Canadian Herpetological Society) and to the ministry's own policy to maintain stable wildlife populations. In the case of the snapping turtle, the proposal is also contrary to the purpose of the *Endangered Species Act, 2007*, which is to protect and recover species at risk.

Snapping turtle

We understand that the proposed amendments for game reptiles under *the Fish and Wildlife Conservation Act* will "restrict snapping turtle harvest across Ontario in accordance with guidance provided by the draft Small Game and Furbearer Management Framework." We do not agree with the ministry, however, that this proposal reflects due consideration of the biology of the species. Nor do we agree that it is consistent with the overall direction of the proposed *Management Plan for the Snapping Turtle (Chelydra serpentina) in Canada*. While the management plan left room for the provinces to arrive at their own decisions about allowing the hunt to continue, the science-based evidence presented in the plan clearly argued against it, as explained further below.

The ministry proposes to lower the daily bag limit to one and possession limit to two, as well as to shorten the hunting season. While these are improvements on current policy, they do not go far enough. A full ban on hunting snapping turtles is required.

Turtles are the most threatened taxa globally (IUCN, 2007), with all but one species of turtle in Ontario listed as at risk.

The snapping turtle was recently added under the Convention on International Trade in Endangered Species (CITES) to be part of the international trade reporting and restrictions (November, 2016). It has been listed as Special Concern in Ontario since 2009 and in Canada since 2008. The Committee On the Status of Endangered Wildlife in Canada (COSEWIC) states the reason for listing this species as follows: "Although this species is widespread and still somewhat abundant, its life history (late maturity, great longevity, low recruitment, lack of density-dependent responses), and its dependence on long warm summers to complete incubation successfully make it unusually susceptible to anthropogenic threats. When these threats cause even apparently minor increases in mortality of adults, populations are likely to decline as long as these mortality increases persist. There are several such threats and their impacts are additive. Aboriginal Traditional Knowledge generally supports the declining trend and population figures in the COSEWIC report." Clearly, protecting this species from hunting pressures is warranted.

The proposed management plan likewise highlights the serious impact of hunting on snapping turtle populations, given the life history of this species: "considering the reproductive strategy of the Snapping Turtle (i.e., delayed sexual maturity, high embryo mortality, extended adult longevity) ... harvesting (legal or illegal) of adults and older juveniles is especially harmful for wild populations" (p. 14). This is due to the animal's "dependence on high adult survival rates to counterbalance low recruitment rates, which are mainly due to the species' reproductive strategy and climatic constraints" (p. 7). Their sensitivity to adult mortality is indicated by a study conducted on alligator snapping turtles where the annual adult survival rate had to be at least 98% in order to maintain a stable population (Reed et al., 2002).

Snapping turtles face many threats, and hunting adds to their cumulative impact. Major threats include habitat loss due to the conversion of aquatic habitat for urban development or agriculture, and the dense road network throughout much of its range in Ontario, leading to high mortality and habitat fragmentation. Other threats include boat mortality, fishing by-catch, mortality from dredging and construction, invasive species, persecution, illegal collection, exposure to toxic contaminants and more.

The additive impact of hunting, on top of all these other threats, is illustrated through life-history models that indicate "that a slight increase (+ 0.1%) in the annual mortality rate of turtles over 15 years of age (due to road mortality or harvesting, for example) would halve the number of adults in the local population in less than 20 years.

Adult survivorship is therefore of critical importance for the persistence of local Snapping Turtle populations” (management plan, p. 8). Under the proposed regulations of a daily limit of one snapping turtle and a possession limit of two, five people on a weekend hunting expedition at a cottage could take 10 snapping turtles from a single population. This would be catastrophic to many small or medium-sized populations.

According to the management plan, “if we do not address the threats to this species, local populations will likely be unable to maintain their current size” (p. 18). Turtle experts across Canada believe that hunting poses a serious threat to snapping turtle populations, yet the ministry proposes to ignore their advice. Rather than choosing to base its decision on sound science and policy, it is choosing to increase the risk of extinction for this species. This is not acceptable. Ontario is one of only two provinces in the country that still allows the hunting of this at-risk turtle. It’s time for the ministry to turn the page and fully embrace its mandate to sustain wildlife populations and protect and recover species at risk.

### Bullfrog

Though the ministry is proposing to restrict the hunting season for bullfrogs and to eliminate the commercial bullfrog licence, we believe Ontario should simply bring an end to the hunting of bullfrogs.

Over 70% of amphibians worldwide are declining at alarming rates, with Ontario’s amphibians following the same trend. The bullfrog is a long-lived amphibian species, requiring two to three seasons for development to maturity. This species has life history characteristics that are optimized for low adult mortality, and consequently hunting adult bullfrogs can have devastating effects at the population level.

Bullfrogs in Ontario face many threats, including habitat loss and fragmentation; hunting adds to the cumulative impact. Declines have been observed in some parts of the province. As noted in *ON Nature* magazine, “commercial and indigenous harvesters have observed a decrease in bullfrog numbers...with some commercial operators reporting ceasing their harvesting efforts in regions where once they were able to fill freezers full of frogs.” In addition, bullfrogs are also threatened by agrochemicals, road salt, road mortality, climate change, disease, pathogens and invasive species (Blaustein and Kiesecker 2002; Hayes et al. 2010; May 2010). An incredibly invasive non-native plant, *Phragmites australis*, is depleting suitable shoreline habitat where bullfrogs were once abundant in southwestern Ontario (Gillingwater unpublished data). As amphibians are currently facing numerous threats, hunting should be removed from this list.

Further investigation of bullfrog populations and current threats are required to inform the protection of this species. Without sufficient knowledge about the declines of this species, the ministry should proceed with caution and end hunting now. The government's focus should be on sustaining this species rather than risk adding the bullfrog to the ever-expanding ranks of species at risk in Ontario.

Thank you for the opportunity to comment on the proposed policy. We urge you to heed our request to end the hunting of snapping turtles and bullfrogs immediately.

Yours truly,

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Ontario Nature



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