



IOWA CHAPTER

February 20, 2014

Martin Konrad
Iowa Department of Natural Resources
Via E-mail martin.konrad@dnr.iowa.gov

Re: Stakeholders comments concerning a closed season for the commercial harvest of turtles, Iowa Administrative Code 571 Chapter 86.1(6)

Dear Mr. Konrad:

The Iowa Chapter of the Sierra Club has approximately 4000 members in Iowa, with members living in each county. Our members work to support biodiversity, including the diversity of all animal species. On behalf of the Sierra Club members, I would like to offer the following comments about establishing a season for the commercial harvest of turtles.

Summary of Sierra Club position

Iowa currently allows an unlimited year-round commercial harvest of common snapping turtle, spiny softshell turtle, smooth softshell turtle, and painted turtle.

The Chapter does not support year-round commercial harvesting of turtles.

The Iowa Chapter supports setting a season that will ensure that the populations of the 4 commercially harvested turtles can sustain their populations at current levels or increase their current populations. That means that the season should be closed during the months the turtles are breeding, developing eggs, and nesting in the spring. Therefore the Chapter supports closing the season from January 1 through July 15 for the commercial harvest of the common snapping turtle, spiny softshell turtle, smooth softshell turtle, and painted turtle. Opening the season from July 16 through the end of December will allow turtles to be harvested after their spring breeding, egg development, and nesting has been completed. However the on-going population health is fragile and could easily result in over-harvest if adequate and proper monitoring is not pursued.

The Chapter also supports a similar season being applied to the non-commercial harvest of turtles.

That being said, the Chapter supports on-going monitoring of both the commercial and non-commercial harvest and population levels, to ensure that the populations are sustained at current levels or are able to increase their populations.

Although the closed season applies only to the commercial harvest of the 4 species of turtles, the Chapter supports monitoring non-commercial harvest of those species to determine the number of

turtles that are harvested and how that changes over time. Although not perfect, the Department of Natural Resources (DNR) monitors furbearers via a bow hunter survey. The Chapter encourages the DNR to look at similar surveys for the non-commercial turtle harvest.

The Chapter also supports funding for biologists to perform on-going field studies on the life cycles and population counts of the commercially harvested turtle species.

Should the studies indicate that one or more of the commercially harvested turtles species is facing a significant drop in population in Iowa, the Department of Natural Resources needs to be prepared to close the season to all commercial and non-commercial harvest of that species or to place a significant restriction on the numbers of turtles or the pounds of turtles that can be harvested. Currently, based on the Iowa Department of Natural Resources study by Scott Gritters, et al., the Iowa Chapter believes that the spiny softshell turtle and the smooth softshell turtle need to be closely monitored.¹ It is clear that our neighboring states have determined that the turtle populations are in such jeopardy that they should not be harvested at all. There is no reason to think that Iowa's turtle population is in any less jeopardy. It appears that the smooth softshell turtle is extremely vulnerable to over-harvest and may already have hit a point of over-harvest.

Additionally the Iowa DNR participates in toxicology studies of fish and turtles to determine if the meat is safe for human consumption. The Chapter supports significantly increasing the number of water bodies that are selected each year for studies, testing both fish and turtles in each lake every 10 years and each river every 5 years. If the turtles are determined to have unsafe levels of toxics in their flesh, it is absolutely necessary to put the turtles on consumption advisories. Currently snapping turtles caught in Pollmiller Park Lake in Lee County are on the 2014 advisory list for mercury.²

North American Model of Conservation

Wildlife management in North America follows the seven principles of the North American Model of Conservation. At a high level, wildlife is owned by the public and hunting or harvesting should be done sustainably. Those principles are

- 1 – Wildlife is Held in the Public Trust – wildlife belongs to the people and is managed on behalf of the people by government agencies for all current and future generations.
- 2 – Prohibition on Commerce of Dead Wildlife – it is illegal to sell the meat of wildlife; however the implementation of the principal has allowed highly regulated sales of pelts of furbearers.
- 3 – Democratic Rule of Law to regulate wildlife resources – seasons and quotas are determined through a democratic process.
- 4 – Wildlife can be Killed Only for a Legitimate Purpose – laws are enacted to restrict mistreating wildlife and to ensure that the animals that are caught are not wasted, but will allow the harvest of certain animals, will allow protection of property, and will allow self-defense.
- 5 – International Resources – wildlife are free to cross international borders and those countries should cooperate in protecting the wildlife and ensuring sustainable harvests.

¹ Scott Gritters, Karen Osterkamp, Denny Weiss, Chad Dolan, Mike Mason, Karen Kinkead, Mike Steuck, Joint Committee on Turtle Harvest, Iowa Department of Natural Resources, "Iowa's Commercial Turtle Harvest", released in 2013, page 6

² Individuals are advised to eat only one meal per week of snapping turtle caught in Lake Pollmiller Park Lake. It should be noted that a number of additional water bodies across Iowa are on the consumption list advising limiting the amount of fish that should be consumed each week, due to toxics including mercury. "Iowa Fishing Regulations", 2014, Iowa Department of Natural Resources.

6 – Science is the Basis for Wildlife Policy – scientific studies will be used as a basis for wildlife policy, such as seasons, quotas, and which animals can be harvested.

7 – Hunting Opportunity for All – every citizen is allowed to hunt and fish and have access to wildlife.

Generally these principles have applied to birds, fish, and mammals. The Winter, 2014, DNR Wildlife Diversity News published an article about the principles and even asked the reader if he or she felt they should apply to amphibians and reptiles.³ The Iowa Chapter believes that these principles should be applied to reptiles and amphibians.

Turtles need to be managed following these principles.

Issues affecting turtle populations

Turtles face a number of challenges in maintaining their populations.

Inherent to turtles is significant loss of eggs due to nest predation from raccoons as well as from dogs and other mammals. Only a small percentage of young turtles survive into adulthood.

Adults reach sexual maturity when they are several years old, increasing their risk of being harvested before they have been able to reach maturity and start regenerating their population.

Iowa's waters have become polluted which affects the ability of turtles to survive. Turtle habitat has been destroyed across the state. Over the last few years, as marginal land has been moved out of CRP and into row crops, the result has been soil washing off the farm fields and silting wetlands which also destroys turtle habitat.

Painted and snapping turtles come into contact with automobiles during nesting season, as the turtles move from the normal habitat to the nesting sites.

Changes in weather patterns also affects turtles. Floods can destroy nests or inundate preferred nesting sites, while drought can dry the wetland habitat that turtles need.

A sustainable harvest will insure that turtles are able to maintain and even increase their populations year after year. The best way to ensure that the population can sustain itself is to ensure that the females are allowed to complete their nesting cycle. That is why a closed season during the spring nesting season is necessary. It is interesting to note that the neighboring states have either closed their commercial harvest (Illinois, Nebraska, South Dakota) or are severely restricting it (Minnesota).⁴ That clearly is an indication that Iowa needs to closely monitor the turtles that are being harvested commercially.

As advocates for using the seven principles of the North American Model of Conservation for the protection of turtles, the Chapter would support a significant curtailment of the commercial turtle harvest, not unlike what is being done in Minnesota or even an outright completely closed season as is being done in Illinois, Nebraska, and South Dakota.

If the turtle harvest exceeds the ability of the turtles to maintain or increase their populations, the end result will be that the population will be harvested to extinction in the state.

³ Karen Kinhead, "News from the Frog Pond", Wildlife Diversity News, Iowa DNR Wildlife Diversity Program, Winter, 2014, page 2

⁴ Scott Gritters, et al., "Iowa's Commercial Turtle Harvest", released in 2013, page 8

A note about the start date for the season

A review of the nesting season for the 4 species of commercially harvested turtle shows:

- Smooth softshell turtles breed in April and May and lay their eggs (12 to 30 per nest) in June or early July.⁵ They also breed in the fall.⁶ The females reach sexual maturity at age 9.⁷
- Spiny softshell turtles breed in April and May and lay their eggs (12 to 30 eggs per nest) in June or early July.⁸ The females reach sexual maturity when they are 8 to 10 years old.⁹
- Painted turtles breed in April and lay their eggs (7 or 8 eggs per nest) in May or June.¹⁰ They also breed in the fall and throughout the summer.¹¹ Adults reach sexual maturity when they are four to six years old.¹²
- The female snapping turtles lay their eggs (up to 30 per nest) in June. Male snapping turtles reach sexual maturity when they are four to five years old while the females reach maturity when they are 6 or 7 years old.¹³

Clearly the July 16 opening date will allow snapping turtles and painted turtles to complete their spring breeding and nesting season. The fall season would not be protected.

Because the spiny and softshell turtles continue nesting into early July, the July 16 season open should allow the softshell turtles to complete their spring breeding and nesting season.

The Iowa Chapter recommends that the Department of Natural Resources pursue studies to determine if changing weather patterns are affecting the nesting season of the four species that are commercially harvested in Iowa.

⁵ Jeff LeClere, “Smooth Softshell Turtle – *Apalone mutica*”, www.herpnet.net/Iowa-Herpetology/index.php?option=com_content&task=view&id=75&Itemid=26; Jeffrey B. LeClere, *A Field Guide to the Amphibians and Reptiles of Iowa*, ECO Herpetological Publishing and Distribution, 2013, page 163; and email from Jeff LeClere to Pam Mackey Taylor, et al., on February 11, 2014. Jeff LeClere is employed by Minnesota Department of Natural Resources as a Zoologist – Amphibians and Reptiles.

⁶ Jeffrey B. LeClere, *A Field Guide to the Amphibians and Reptiles of Iowa*, ECO Herpetological Publishing and Distribution, 2013, page 163

⁷ Scott Gritters, et al., “Iowa’s Commercial Turtle Harvest”, released in 2013, page 11

⁸ Jeff LeClere, “Spiny Softshell Turtle – *Apalone spinifera*”, www.herpnet.net/Iowa-Herpetology/index.php?option=com_content&task=view&id=76&Itemid=26; Jeffrey B. LeClere, *A Field Guide to the Amphibians and Reptiles of Iowa*, ECO Herpetological Publishing and Distribution, 2013, page 168; and email from Jeff LeClere to Pam Mackey Taylor, et al., on February 11, 2014

⁹ Scott Gritters, et al., “Iowa’s Commercial Turtle Harvest”, released in 2013, page 11

¹⁰ Jeff LeClere, “Northern Painted Turtle – *Chrysemys picta*”, www.herpnet.net/Iowa-Herpetology/index.php?option=com_content&task=view&id=73&Itemid=26

¹¹ Jeffrey B. LeClere, *A Field Guide to the Amphibians and Reptiles of Iowa*, ECO Herpetological Publishing and Distribution, 2013, page 127

¹² Jeff LeClere, “Northern Painted Turtle – *Chrysemys picta*”, www.herpnet.net/Iowa-Herpetology/index.php?option=com_content&task=view&id=73&Itemid=26

¹³ Jeff LeClere, “Snapping Turtle – *Chelydra serpentina*”, www.herpnet.net/Iowa-Herpetology/index.php?option=com_content&task=view&id=77&Itemid=26

Need for studies

The Iowa Chapter believes that biologists need to be monitoring the population levels of the four turtle species that are commercially harvested. LeClere also states “There have been no studies to quantify the effects of turtle harvest in Iowa, and some wetlands may be more susceptible to over harvesting than others. A monitoring initiative should be utilized to track numbers of turtles harvested annually by each licensee in Iowa so that trends can begin to be analyzed.”¹⁴ Clearly no one knows that health of the turtle population in each wetland, river, stream, or lake in Iowa .

As part of the Iowa Wildlife Action Plan, a document produced by the Iowa Department of Natural Resources, species are identified as Species of Greatest Conservation Need (SGCN) if the species is vulnerable to extinction or if it is imperiled or in decline. The next Action Plan will be issued in 2015. LeClere indicates that the smooth softshell turtle is proposed as a Species of Greatest Conservation Need.¹⁵ It is ironic that one section of the DNR is so concerned about the vulnerability of the smooth softshell turtle that it is proposing listing as a SGCN while another section of the DNR is allowing unlimited harvest of the smooth softshell turtle, albeit with a closed season from January to mid July.

Even the common snapping turtle is showing signs of over-harvest. According to LeClere, “Iowa Department of Natural Resources Fisheries personnel working on the Mississippi River are noticing less common snapping turtles than in previous years, and also note that large turtles are rarely caught anymore.”¹⁶ Given that the sizes are becoming smaller, even non-commercial harvesters can have a devastating effect on the snapping turtle, since non-commercial harvesters are allowed to capture 100 pounds of live turtle or 50 pounds of dressed turtle. The smaller the turtle, the more turtles that are captured, which puts greater pressure on the over-all numbers of individuals in the population.

Economic impact

The Chapter is aware that any Notice of Intended Action requires a review of the economic impact of any new rule.

Obviously the economic analysis done by the Iowa Department of Natural Resources (DNR) would include the effect a closed season would have on the turtle harvesters, their helpers, and the commercial operations that purchase those turtles. I am aware that there are approximately 150 to 180 commercial turtle harvesters, who are earning approximately \$360,000 each year from their harvest.¹⁷

Clearly if the harvest continues at its current unsustainable pace and if the turtle populations make precipitous declines, the value of the commercial harvest will decline toward zero.

Most of the commercially harvested turtles are shipped to China and to other Asian countries. Many of the native turtles in China and southern Asia have been harvested to extinction. Iowans do not want their native turtles harvested to extinction in order to supply demand from foreign countries, regardless of how much economic benefit is accrued from the harvest. Certainly international trade

¹⁴ Jeffrey B. LeClere, A Field Guide to the Amphibians and Reptiles of Iowa, ECO Herpetological Publishing and Distribution, 2013, page 12

¹⁵ Jeffrey B. LeClere, A Field Guide to the Amphibians and Reptiles of Iowa, ECO Herpetological Publishing and Distribution, 2013, page 29

¹⁶ Jeffrey B. LeClere, A Field Guide to the Amphibians and Reptiles of Iowa, ECO Herpetological Publishing and Distribution, 2013, page 124

¹⁷ Phone conversation between Pam Mackey Taylor and Martin Konrad, February 10, 2014

should not trump the desire of Iowans who want to trap a few native turtles for their own non-commercial use.

The economic impact of the turtle harvest must be seen beyond the commercial harvesters. Many of our members enjoy wildlife viewing, outdoor photography, paddling and other outdoor recreation. And we expect to be able to view turtles. Outdoor recreation supports significant amounts of economic activity in Iowa – from the purchase of outdoor equipment, money spent on hotels and meals, and supporting outfitters.

Allowing turtles to be extirpated from Iowa's waters also has a cost and brings with it costs to reintroduce turtles into their native habitat. In fact, the Iowa Chapter finds it unacceptable to harvest wild populations of turtles to the point of extirpation. Turtles do not travel far from their homes and are unlikely to self-reintroduce themselves into water bodies where they have been extirpated.

Driving toward a sustainable harvest of turtles benefits all of us – commercial harvesters, non-commercial harvesters, and outdoor enthusiasts.

The Iowa Chapter expects that the DNR will analyze the costs of extirpation and restoration of turtle species at the same time the costs to the existing commercial harvesters is analyzed. Furthermore, the Chapter expects that the DNR will also analyze the benefit those people who are engaged in wildlife viewing and related activities brings into the state.

Conclusion

The Iowa Chapter supports the proposal to close the commercial harvest of turtles from January 1 through July 15 with the following caveats:

- That the Iowa Department of Natural Resources (DNR) monitor populations of the 4 commercially harvested turtles to determine if the harvest levels are sustainable or are allowing the population of the species to increase, particularly closely monitoring the population levels of the spiny and smooth softshell turtles
- That the DNR be prepared to close the season for any turtle species that is facing population declines or to place significant restrictions on the numbers of turtles or the pounds of turtles that can be harvested
- That a similar season be applied to the non-commercial harvest of turtles
- That the DNR monitor the non-commercial harvest of turtles to determine how many turtles are being harvested and how the populations of turtles are changing from year-to-year
- That biologists are funded to perform on-going field studies on the life cycles of the commercially harvested turtle species.
- That the DNR increase testing of turtles for toxics such as mercury and PCBs, along with issuing consumption advisories when the levels of toxics will affect human health

It is clear that the populations of the four commercially harvested turtle species are fragile. Our neighboring states have determined that the turtle populations are in such jeopardy that they should not be harvested at all. There is no reason to think that Iowa's turtle population is in any less jeopardy.

Dr. Fred Janzen, Iowa State University ecology professor and herpetologist has warned “if we are not sure what's out there, we ought to err on the side of caution rather than exploitation. Once they are

gone, they won't come back.”¹⁸ “Turtle populations, unlike deer or pheasant numbers, are difficult to accurately estimate.”¹⁹

The DNR must be able and must be prepared to completely close the season if the studies determine that the populations of a species are being over-harvested, and the species is not able to sustain or increase its population.

Thank you for considering these comments.

Sincerely,

/s/ Pamela Mackey Taylor

Pam Mackey Taylor
Conservation Chair
Sierra Club, Iowa Chapter

¹⁸ Orlan Love, “Shell Shock”, Cedar Rapids Gazette, November 10, 2011

¹⁹ Orlan Love, “Shell Shock”, Cedar Rapids Gazette, November 10, 2011