

BEFORE THE MISSOURI DEPARTMENT OF CONSERVATION
PETITION TO END UNLIMITED COMMERCIAL COLLECTION OF COMMON
SNAPPING AND SOFTSHELL TURTLES



CENTER FOR BIOLOGICAL DIVERSITY
GREAT RIVERS ENVIRONMENTAL LAW CENTER

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Notice of Petition

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Pursuant to Missouri Revised Statutes § 536.041.1, the Center for Biological Diversity and Great Rivers Environmental Law Center hereby petition the Missouri Department of Conservation to end the unlimited commercial collection of common snapping and softshell turtles in the state. Commercial collection of wild turtles intensifies the effects of water pollution, habitat loss, road mortality and incidental take from fishery devices, which are already contributing to turtle declines in the state and across the country.

The Center for Biological Diversity (“Center”) is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center is supported by over 1 million members and online activists throughout the United States, including approximately 13,500 members and supporters in Missouri. The Center and its members are concerned with the conservation of rare wildlife, including turtles, and their essential habitats.

Great Rivers Environmental Law Center is a nonprofit public interest environmental organization working to:

- promote the public health by encouraging cleaner energy, improved environmental performance by businesses, and more efficient transportation and land use, thereby achieving cleaner air and water, and improving the quality of life in the region;
- preserve open spaces, forests, floodplains and wetlands for their recreational, aesthetic, and agricultural benefits, and their values as flood storage and habitat for migratory birds and other species;
- protect disadvantaged populations from an unreasonable share of the environmental burdens of modern society; and
- aid and advise citizens and organizations in asserting and defending their interests in environmental values before administrative officials, and, as a last resort, before the courts.

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I. INTRODUCTION

Turtles are the oldest living group of reptiles on earth with fossil evidence suggesting that turtles were alive over 200 million years ago. Although turtles thrived on this planet for millions of years, turtles are now among the most threatened of any major group of vertebrates. Forty percent of all turtles are threatened according to the International Union for Conservation of Nature (Rhondin & van Dijk 2010).

Wild collection is the primary driver of turtle declines across the world (Bohm et al. 2013). Overexploitation has caused population declines in almost all turtle species that are now extinct, critically endangered, or rare (Klemens and Thorbjarnarson 1995), and it contributes to population declines that are also caused by water pollution, habitat loss, road mortality and other threats (Moll and Moll 2004; Schlaepfer et al. 2005). Turtles are beneficial scavengers that feed on water plants, dead animals, snails, aquatic insects and crayfish. As such, population declines due to overexploitation can cause changes in energy flow, nutrient cycling and food web structure (Mali et al. 2014).

In Missouri, seventeen species of turtles can be found. Although most of Missouri's turtle species enjoy protection from wild collection, Missouri allows unlimited commercial collection of common snapping turtles and softshell turtles in the state's commercial waters. 3 CSR 10-20.805(13) ("Commercial fish include common snapping and soft-shelled turtles and crayfish taken from waters open to commercial fishing."); 3 CSR 10-10.725(1) ("Commercial fish and live bait may be taken and possessed in any numbers by the holder of a commercial fishing permit from commercial waters.").

Common snapping turtles and softshell turtles are wild caught in large numbers in Missouri and across the county both for food and for the pet trade. This harvest poses a significant risk to the future of Missouri's populations of common snapping turtles and softshell turtles.

Missouri law provides that "[a]ny person may file a written petition with an agency requesting the adoption, amendment or repeal of any rule." Missouri Revised Statutes § 536.041.1. Pursuant to this authority and for the reasons explained below, Petitioners request that the Missouri Department of Conservation grant this petition and end unlimited commercial collection of the state's wild turtles.

II. BACKGROUND

A. The Commercial Turtle Trade in the U.S.

The United States has the highest richness of turtles in the world with 89 species and subspecies of turtles (Rhondin & van Dijk 2010; Bohm et al. 2013), and it has developed into a significant exporter of wild-collected adult turtles. In the last five years, more than 17 million wild caught turtles were exported from the United States. Most turtles harvested in the United States are exported to supply food and medicinal markets in Asia, where turtle consumption rates

have soared and where native populations of turtles were rapidly depleted (Klemens and Thorbjarnarson 1995; Gibbons et al. 2001; Reed and Gibbons 2003). China is the biggest consumer of turtles and has long commercially pursued their native turtles as food and Traditional Chinese Medicine, driving most populations to depleted levels and even extinction in the wild (Behler 1997; Chen et al. 2009). Indeed, most turtle species in Vietnam and southern China are endangered and turtles can no longer be found in the wild in Vietnam (Kiestler and Juvik 1997). Asian cuisine prizes America's softshell turtles in particular because they appear similar to endemic Asian softshell turtle species that have been depleted by the food trade (Christiansen 2008).

Large scale turtle harvest in the United States is organized as a pyramid scheme including trappers, middlemen, and dealers (Mali et al. 2014). Turtle dealers usually have an interstate network of several hundred employees capable of exporting thousands of turtles a year (Mali et al. 2014). Large adults are the most valuable on the meat market and are a primary target of commercial turtle trappers (Close and Seigel 1997; Ceballos and Fitzgerald 2004). Yet the adult life stage is the most sensitive to harvest (Heppell 1998; Congdon et al. 1993; Congdon et al. 1994; Zimmer-Shaffer et al. 2014).

The available data on turtle exports from the United States indicate that export-driven exploitation has targeted the common snapping turtle (*Chelydra serpentina*), Florida softshell (*Apalone ferox*), and spiny softshell (*A. spinifera*), in particular. Some of the smaller hard-shelled turtle species are also targeted, including diamondback terrapins and map turtles. While export levels of freshwater turtles from the United States appear variable, the long-term trend shows an increase in trade for most species (Weissgold 2010). Louisiana has become a huge exporter of wild caught turtles; the number of wild caught turtles exported from Louisiana increased from 80,050 in 2008 to 6,386,030 in 2009 and has remained high (Mali et al. 2014).

B. Wild Turtle Collection in Missouri

Missouri continues to allow unlimited commercial capture of three turtle species in the state: common snapping turtles, spiny softshell turtles and smooth softshell turtles. 3 CSR 10-20.805(13) ("Commercial fish include common snapping and soft-shelled turtles and crayfish taken from waters open to commercial fishing."); 3 CSR 10-10.725(1) ("Commercial fish and live bait may be taken and possessed in any numbers by the holder of a commercial fishing permit from commercial waters."). Holders of a commercial fishing permit may take unlimited numbers of these turtles from "commercial waters" with no closed season. Commercial waters include portions of the Missouri River, Mississippi River and St. Francis River. 3 CSR 10-20.805(14).

The number of common snapping turtles collected in Missouri has varied widely since 2002. High numbers were collected in 2003 (990), 2006 (1,185) and 2007 (1,539) (McMullen et al. 2014). The lowest number collected occurred in 2009 (107) but steadily increased until 2013 (880) (McMullen et al. 2014). Then a sharp decline occurred in 2014 (261) (McMullen and Siech 2015). Peak softshell turtle harvest occurred in 2002, 2007, and 2009, with harvest generally declining since 2009. More recently, commercial harvest of softshell turtles increased from 30

turtles in 2013 to 84 turtles in 2014 (McMullen and Siech 2015). Annual commercial turtle harvest in Missouri from 2002 - 2014 is displayed in the figures attached to this petition.

Missouri's commercial harvest of common snapping turtles and softshell turtles occurs exclusively in the Missouri and Mississippi rivers. No turtles have been commercially harvested from the St. Francis River since 2010, even though commercial harvest is permitted in that river (McMullen et al. 2014). Since 2002, commercial turtle harvest has been focused during June to September, with peak common snapping turtle harvest occurring in July and peak softshell turtle harvest occurring in August (McMullen et al. 2014). In Missouri, there are no data available on population size or structure for these species (Zimmer-Shaffer et al. 2014).

Missouri also allows non-commercial collection of wild turtles with a daily limit of five common snapping turtles and five softshell turtles. 3 CSR 10-6.620. Allowable methods for capturing the turtles include: snagging, snaring, grabbing, bow, crossbow, trotline, throwline, limb line, bank line, jug line, hand, handnet, or pole and line. Shooting turtles with firearms is prohibited except as needed to protect private property, as provided in 3 CSR 10-4.130. *Id.* Common snapping turtles can be taken throughout the year, and soft-shelled turtles from July 1 through December 31. *Id.*

C. Natural History and Status of Common Snapping Turtles

The common snapping turtle, a Missouri turtle species subject to unlimited commercial collection, is a large mostly aquatic turtle, weighing as much as 50 pounds (Ernst and Lovich 2009, p. 113-14). The common snapping turtle occurs in the United States, Canada, throughout Mexico, and as far south as Ecuador (NatureServe 2015). In Missouri, common snapping turtles are found statewide.

Snapping turtles occupy all types of freshwater habitats, especially those with soft mud bottoms and abundant aquatic vegetation or submerged brush and logs (Ernst and Lovich 2009, p. 115). The species exhibits good tolerance of altered habitats (NatureServe 2015). Common snapping turtles have a diverse diet and feed on insects, crayfish, fish, snails, earthworms, amphibians, snakes, small mammals, and birds. Up to a third of their diet, however, is made up of aquatic vegetation.

The species is characterized by delayed female maturation, relatively low fecundity, low recruitment, and long generation times. Snapping turtles commonly experience low reproductive success due to extensive predation on their eggs, but females produce large clutches and may live and reproduce for several decades, so they usually eventually produce offspring that join the breeding population (NatureServe 2015). In Algonquin Park, for example, the probability of a snapping turtle embryo surviving to sexual maturity is less than 0.1% (COSEWIC 2008).

Although common snapping turtles are not significantly threatened overall, urbanization and excessive harvest has severe local impacts (NatureServe 2015; van Dijk 2016a). Females are especially susceptible during nesting season, as crossing roads exposes them to injury and death from automobile strikes and makes them easy prey for humans who take them for food (Ernst and Lovich 2009, p. 113). Other threats include water pollution, drainage of water bodies, water

impoundment and channelization, and development leading to increased raccoon populations (Ernst and Lovich 2009, p. 137).

The common snapping turtle is widely exploited for local, subsistence collection, as well as commercial trade for local, national, and international consumption (van Dijk 2016a). The flesh of the snapping turtle is eaten throughout its range and a soup can be made from it (Ernst and Lovich 2009, p. 137). In the United States, snapping turtles are sold at Asian seafood markets and Asian restaurants. They are also sold as pets, and juvenile snapping turtles ship from online dealers for about \$70 each (http://www.reptilestogo.com/For_Sale_Common_Snapping_Turtle_Baby.htm; <http://myturtlestore.com/juvenile-snapping-turtles-for-sale/>).

Although snapping turtle populations have been known to be vigorous throughout much of the species' range, long-term persistent take makes the species vulnerable to decline (Harding and Holman 1990; Tucker and Lamer 2004; USFWS 2016). To be sure, some populations cannot withstand even minimal exploitation without undergoing a decline in numbers (Brooks et al. 1991; Brooks et al. 1988). Life-history models indicate that only slight increases (0.1) in annual adult mortality rate (such as from road mortality or harvesting) will cause a snapping turtle population to be halved in under 20 years (COSEWIC 2008; Congdon et al. 1994).

For example, harvesters have reported declining numbers of turtles in harvested areas for snapping turtles on the upper Mississippi River (Paisley et al. 2009). Population recovery potential is low, due to a lack of an effective density-dependent response in reproduction and recruitment (Brooks et al. 1991; Galbraith et al. 1997). Indeed, in Michigan, snapping turtles were intensively trapped for 2-3 years in the 1980s, which greatly reduced populations. Collection was then prohibited and by 2009, populations were approaching pre-impact levels, suggesting a 25-30 year recovery period after depletion (van Dijk 2016a).

While local declines have been documented, the species has not reached a 30 percent decline over 50 years (van Dijk 2016a). As such, common snapping turtles are included on the IUCN Red List as a species of "least concern" (van Dijk 2016a).

Collection of snapping turtles from the wild and captive production in turtle farms for export to East Asia increased consistently and substantially in recent years, from about 10,000 common snappers declared as exported from the United States in 1999 to over 1 million annually in more recent years (van Dijk 2016a; Weissgold 2010; USFWS 2016). Common snapping turtles are second only to red-eared sliders in terms of number of live individuals exported each year (Adkins Giese 2011).

As for wild-caught live common snapping turtles, nearly 200,000 were exported from 2006-2010. Export data shows that exports of wild caught common snapping turtles increased dramatically over with nearly 600,000 caught and exported in the last five years. Several huge individual shipments to China have occurred in the last decade, including 20,000 in 2011; 24,250 in 2011; 35,000 in 2012; two shipments in excess of 10,000 in 2013; and shipments of 20,000, 14,950 and 11,000 in 2015. More than 200,000 live, wild-caught common snapping turtles were exported annually in each of 2012 and 2014.

On May 23, 2016, the U.S. Fish and Wildlife Service announced a final rule to regulate and monitor international trade of common snapping turtles and three softshell turtles. The rule, which responds in part to a 2011 request from the Center for Biological Diversity documenting the harms of the turtle trade, adds the turtles to Appendix III of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This designation is designed to curb overexploitation of these freshwater turtles for Asian food and medicinal markets.

Wild capture of common snapping turtles is prohibited in some states (including Michigan and New York) or strictly regulated (including Alabama, Maryland, Texas). But some states still allow unlimited commercial take (Kentucky, Missouri, Ohio, South Carolina, and Tennessee) (Nanjappa and Conrad 2011; van Dijk 2016a).

D. Natural History and Status of Softshell Turtles

Three species of softshell turtles exist in the United States: Florida softshell, spiny softshell and smooth softshell. The spiny and smooth softshells are found in Missouri.

The smooth softshell turtle has a smooth upper shell that lacks small bumps or scutes and is most often observed in the open waters of medium-sized to large rivers and streams with moderate to fast currents and visibility varying from clear to cloudy (Ernst and Lovich 2009, p. 614). Unlike the smooth softshell, the spiny softshell turtle has small bumps or spines on the front of the upper shell and small ridges on each side of the snout. As with the smooth softshell, the spiny softshell is primarily a riverine species. The spiny softshell, however, also inhabits ecotonal areas, small creeks, marsh rivelets, roadside and irrigation ditches, farm and natural ponds, bayous, oxbows, large lakes, and impoundments.

The smooth and spiny softshells are characterized by delayed female maturation, a small clutch size (but multiple clutches), high neonate parental involvement, and low neonate survivorship. Males bask in shallow water and nests are often in close proximity to each other, facilitating collection. They feed on fish, crayfish, salamanders, tadpoles, frogs, snails, and aquatic insects.

Softshells can be locally common with high reproductive potential by turtle standards (van Dijk 2016b,c). The smooth softshell is reportedly extirpated from Pennsylvania and possibly extirpated from West Virginia. They are rare in the Ozarks of Missouri (Washington University undated).

The presumed primary threats to both smooth and spiny softshell turtles are overexploitation and habitat loss or habitat degradation, some predation and bycatch, and periodic natural flooding. The release of pesticides and both industrial and household chemicals into the waterways of softshells is harmful, and softshells have now been found to contain many heavy metal and PCB contaminants (Ernst and Lovich 2009, p. 634).

International trade in smooth softshell turtles is small. Less than 500 wild caught smooth softshell turtles were exported from 2009-2014 (Weissgold 2010; USFWS 2016). These numbers are down from previous years, likely reflecting the rarity of the species.

In contrast, the spiny softshell is widely traded internationally as live specimens for the pet trade and consumption. The impact of commercial exploitation appears to be undocumented but bycatch in commercial fisheries and recreational fishing is suspected to be a factor in the observed decline of some populations (Brown et al. 2012; van Dijk 2016c).

In fact, spiny softshells have long been exploited for consumption and more recently for export of adults for food and of hatchlings as pets and for Asian farming operations (van Dijk 2016c). As for spiny softshells declared as “wild caught,” 40,000 were exported from 2006-2010 and 35,000 were exported in the last five years. After years of high exportation in 2012 and 2013 -- with more than 12,000 wild-caught spiny softshells exported each of those years -- export numbers have sharply declined, which may reflect scarcity. Turtle trappers exported only 4,105 wild-caught spiny softshells in 2014 and 660 in 2015.

The smooth softshell is subject to a variety of state laws and regulations (van Dijk 2016b) and has endangered status in Illinois (Illinois Endangered Species Protection Board 2015). The spiny softshell is considered “vulnerable” in Florida, Alabama, North Carolina, and Montana, and it is considered “imperiled” in South Dakota, New York, and Virginia (NatureServe 2015; North Carolina Wildlife Resources Commission 2014; New York Dept. of Environmental Conservation 2007). It is threatened in Vermont (Vermont Fish and Wildlife Dept. 2015). It is managed as a nongame resource across much of the United States (van Dijk 2016c). Softshell turtles are included on the IUCN Red List as a species of “least concern” (van Dijk 2016b,c).

Along with the common snapping turtle and the Florida softshell turtle, the smooth and spiny softshell turtles were added to CITES Appendix III in May of 2016.

II. JUSTIFICATION FOR THE REQUESTED RULEMAKING

A. Wild Turtle Populations Cannot Withstand Unlimited Commercial Collection

Natural populations of turtles are characterized by a suite of life history characteristics that predispose these populations to rapid declines when subject to wild collection (Congdon et al. 1993, 1994; Galbraith et al. 1997; Heppell 1998). Among these characters are delayed maturity, dependence on high annual survivorship of adults, and high natural levels of nest mortality (Reed and Gibbons 2003).

Removing even a few adult turtles from a population can have effects lasting for decades because each adult turtle removed eliminates the reproductive potential over a breeding life that may exceed 50 years (Brooks et al. 1991). For example, a modest harvest pressure (10% per year for 15 years) of common snapping turtles may result in a 50% reduction in population size (Congdon et al. 1994). Indeed, stable turtle populations are dependent on sufficient long-

lived breeding adults to offset the effects of high egg and nestling mortality and delayed sexual maturity (Congdon et al. 1993; Wilbur and Morin 1988).

As such, scientists have repeatedly documented that freshwater turtles cannot sustain any significant level of harvest from the wild without leading to population declines (Ernst et al. 1989; Congdon et al. 1993, 1994; Galbraith et al. 1997; Heppell 1998; Gibbons et al. 2000; Reed and Gibbons 2003; Burke et al. 2000; Gamble and Simons 2004; Brown et al. 2011; Zimmer-Shaffer et al. 2014). Congdon et al. (1994) concluded that carefully managed sport harvests of some populations may be sustainable, but “commercial harvests will certainly cause substantial population declines.” After populations are depleted by overharvest, they can take decades to recover (Brown et al. 2011).

Zimmer-Shaffer and others (2014) gathered demographic rates from the literature for snapping turtles (*Chelydra serpentina*), smooth softshells (*Apalone mutica*), and spiny softshells (*Apalone spinifera*), which are harvested in Missouri, and developed deterministic, density-independent, stage-based matrix models to assess turtle population response to plausible harvest rates estimated from field sampling. When the scientists applied plausible, field-estimated annual harvest rates under mean demographic rates, populations decreased for snapping turtles in all instances except when harvesting only juveniles at the minimum harvest rate. For softshell turtles, under mean and minimum demographic rates, no field-estimated harvest could be sustained. For snappers and softshells, harvest was sustainable only when demographic rates were at the maximum values, which are highly improbable to occur frequently in the wild. Adult turtles were the most important segment of the population demographically. These results corroborate the findings of other studies which indicate that even low annual harvest rates may have detrimental effects on the long-term sustainability of turtle populations at localized scales.

Life history traits not only constrain turtles in their response to harvest but also mask early detection by observers. In contrast to “traditional” managed wildlife and fisheries species, where the effects of management measures become measurable within years, the time scale of turtle life history results in exploitation effects becoming apparent and continuing to have effects for decades (van Dijk 2010).

Missouri’s authorization of commercial collection of common snapping turtles and softshells poses a risk to other species too. Scientists have documented incidental mortality from commercial fishing nets in Missouri (Fratto et al. 2007; Barko et al. 2004; Braun and Phelps 2016).

To be sure, Missouri law allows commercial turtle collectors to deploy an unlimited number of hoopnets to capture freshwater turtles. 3 CSR 10-10.725. Hoopnets range in length but most are long collapsible cylinder-shaped wire mesh or webbed netting funnel traps. The narrowing throat is open on one end to allow turtles and other aquatic animals to enter and not turn around to escape. The trap is baited with fish, stretched and weighted to the stream floor to capture hungry wildlife. These devices are capable of capturing all aquatic animals in the trap location including fish, aquatic mammals (such as beaver, muskrat, otter, and mink), snakes and state and federal threatened and endangered species. Even when partially submerged to allow

captured animals to breathe, the likelihood of these traps drowning incidentally-captured wildlife is significant due to unpredictable stream hydrology (rising waters from rain events), instability of trap design, and weight and movement of captured animals. Hoopnets and other turtle collecting devices have also been known to capture aquatic migratory birds that are protected under the Migratory Bird Treaty Act, 16 U.S.C. § 703.

In addition, turtle collectors often misidentify protected species that appear similar to non-protected turtles. For example, trappers often cannot distinguish alligator snappers from common snappers and coin both species simply as “loggerheads.” Collectors who can distinguish these species and who realize the high value of alligator snappers for the international pet trade may purposely harvest them. The U.S. Fish and Wildlife Service has documented numerous turtle trading violations in Missouri, which have led to convictions under the Lacey Act (Burlison undated). Game wardens are not often fully trained to distinguish most aquatic turtle species, and face difficulty enforcing the law when encountering collectors in the field.

In Missouri, the western chicken turtle, Blanding’s turtle, Illinois mud turtle and yellow mud turtle are listed as state endangered and could be incidentally killed or captured by commercial turtle collectors. 3 CSR 10-4.111(3)(c). Restrictions on commercialization of turtles in Missouri would likely lead to less incidental take of nontarget species.

The commercial turtle trade not only depletes wild turtle populations, but also carries the risk of introducing diseases, upsetting ecological balances, causing genetic pollution of resident native turtle populations (van Dijk 2010).

B. Turtle Meat Poses a Human Health Risk

A string of published scientific evidence demonstrates that consumption of turtle meat, the shell, organs and body parts can be harmful to humans. Meyers-Schöne and Walton (1994) examined dozens of scientific studies of pesticide and metal concentrations in freshwater turtles from the 1960s through the 1980s. Over a dozen studies found significant concentrations of numerous pesticides in freshwater turtles in states throughout the south, including aldrin, chlordane, DDT, dieldrin, endrin, mirex, nonachlor, and toxaphene (Meyers-Schöne and Walton 1994). Studies found bioconcentration of mercury and other metals such as aluminum, barium, cadmium, chromium, cobalt, copper, iron, lead, molybdenum, nickel, strontium, and zinc in turtles in Florida, Georgia and other southern states (Meyers-Schöne and Walton 1994).

Turtles, as apex trophic animals, will bioaccumulate toxins from contaminated prey (Kennish and Ruppel 1998). Because of their longevity, their exposure time to environments with aquatic contaminants is longer, which causes turtles to retain greater amounts of bioaccumulation compared to shorter lived lower trophic animals like finfish (Kennish and Ruppel 1998; Rowe et al. 2008). Turtles that burrow and submerge themselves in contaminated sediment, including snapping turtles and softshell turtles, are likely to have greater levels of aquatic contaminants because their pathway of exposure is greater.

In 2004 the EPA issued a national fish consumption advisory for mercury in both private and public waters in Missouri that still remains in effect (USEPA 2004; USEPA 2016). The

Missouri Department of Health and Senior Services has conducted bioaccumulation studies of fish tissue taken from lakes and streams in Missouri, which show elevated levels of methyl mercury above the 0.5 mg/kg consumption advisory level. MDHSS's studies also yielded high levels of organic pollutants. Missouri has fish consumption advisories based on contamination with mercury, PCBs, chlordane and lead (MDHSS 2016). Such advisories are evidence that turtle meat is also contaminated.

Given the contamination of Missouri streams and scientific evidence that turtles bioaccumulate high levels of aquatic contaminants, eating wild caught turtles in Missouri poses a human risk. This provides yet another reason to prohibit commercial collection and sale of all wild caught turtles in Missouri.

C. Most States Have Ended This Harmful Practice

Numerous state wildlife agencies have ended commercial harvest of native freshwater turtles. For example, North Carolina, Alabama and Mississippi have long banned this harmful practice.

Starting in 2007, the Center for Biological Diversity identified 12 states that still allowed commercial collection of turtles (Arkansas, Florida, Georgia, Iowa, Kentucky, Louisiana, Missouri, Ohio, Oklahoma, South Carolina, Tennessee, and Texas). We submitted administrative rulemaking petitions requesting each to prohibit commercial harvest of freshwater turtles. The petitions and background information on the commercial harvest of freshwater turtles can be found on the Center's website at:

http://www.biologicaldiversity.org/campaigns/southern_and_midwestern_freshwater_turtles/index.html .

In response to the Center's advocacy and administrative rulemaking requests, in 2007 the Texas Parks and Wildlife Commission voted to ban commercial collection of native Texas turtles on public lands and waters, with an allowance for commercial capture from private property for a few more common species. In 2010, no wild caught turtles were exported from Texas (Mali et al. 2014). Oklahoma banned commercial harvest of turtles from public waters but a small commercial harvest still exists in private waters. 29 Okl. St. § 6-204; OAC § 800:15-9-3. Florida closed commercial turtle harvest in both public and private waters. In South Carolina, it is now unlawful to remove more than 10 turtles from the wild at one time and more than 20 turtles in one year, for nine native species. In 2012, Georgia set annual catch limits of 100 turtles per year for the Florida softshell turtle, spiny softshell turtle and river cooter; 300 per year for the common snapping turtle, painted turtle, eastern mud turtle and loggerhead musk turtle; and 500 per year for the pond slider. In 2012, Alabama banned all commercial collection and killing of wild turtles and their eggs in public and private waters.

As individual states close or restrict turtle trapping within their borders, harvest pressure increases on the remaining states without restrictions (Mali et al. 2014). In addition, turtle poachers often illegally trap in states with restrictions and claim that the turtles came from an adjacent state where trapping remains legal (Mali et al. 2014). In that way, overexploitation can more easily occur in regions with inconsistent state regulation of turtle trapping.

Of the states that share a border with Missouri, only Arkansas allows unlimited commercial collection of turtles. 002 00 CARR 001 (Section 34.04). Commercial sale of turtles caught in Kansas is prohibited, K. S. A. § 32-1005, and Kansas has a daily personal limit of eight snapping turtles and softshell turtles, K.A.R. § 115-25-15. The Iowa legislature in March mandated that the Iowa Department of Natural Resources adopt rules establishing seasons and daily catch limits for the commercial harvest of turtles in any waters of the state, Iowa Code § 481A.67, and in July, the Department published proposed rules that, if finalized, would impose seasons, daily bag limits and possession limits for common snapping turtles, painted turtles, spiny softshells and smooth softshells. Illinois prohibits commercial harvest of turtles. 17 Ill. Adm. Code 880.10. As for personal collection, only common snapping turtles can be taken in Illinois with a daily bag limit of two. 17 Ill. Adm. Code 880.30.

If Missouri grants this petition and restricts commercial trapping of turtles, as in Kansas and Illinois (and Iowa, after its rules are finalized), the region would be better equipped to protect its turtle populations by making clear to turtle traders that trade is strictly regulated and enforced in the region.

III. PROPOSED RULE AMENDMENT

Under the proposed rule amendment, the strikethrough language below, which authorizes the commercial collection of turtles by defining them as “commercial fish,” would be deleted from 3 CSR 10-20.805 (Definitions):

(13) Commercial fish: All fish except endangered species as listed in 3 CSR 10-4.111(3) and game fish as defined in this rule. Includes those species for which sale is permitted when legally obtained. For purposes of this Code, packaged salt water species or freshwater species not found in waters of this state, when the processed fish are truly labeled as to content, point of origin, and name and address of the processor, are exempt from restrictions applicable to native commercial fish. Commercial fish include ~~common snapping and soft-shelled turtles and~~ crayfish taken from waters open to commercial fishing. In the Mississippi River and that part of the St. Francis River which forms the boundary between the states of Arkansas and Missouri, commercial fish also include channel, blue, and flathead catfish at least fifteen inches (15") in total length. In the Mississippi River only, commercial fish also include paddlefish at least twenty-four inches (24") in length (measured from eye to fork of tail) and shovelnose sturgeon twenty-four inches to thirty-two inches (24"–32") in length (measured from tip of snout to fork of tail) upstream from Melvin Price Locks and Dam.

References to turtles in the reporting requirements of 3 CSR 10-10.727 (Record Keeping and Reporting Required: Commercial Fishermen) would also be deleted as unnecessary:

(1) Commercial fishermen and roe fish dealers shall keep a dated receipt that includes the weight and species of fish, **[and]** the weight of extracted fish eggs

(raw or processed) of each species, ~~and the number and species of turtles that were sold or given away and the name, address, and signature of the recipient.~~ These receipts shall be retained for three (3) years and shall be made available for inspection by an authorized agent of the department at any reasonable time.

(2) Commercial fishermen and roe fish dealers shall submit a complete and accurate monthly report on a form furnished by the department showing the origin (water area), weight, [and] species of fish and fish eggs, ~~and the number and species of turtles taken or purchased by him/her during the preceding month,~~ or a negative report if none were taken. Printed copies of these forms can be obtained from the Missouri Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180 and online at www.missouriconservation.org. Monthly reports must be received by the department within thirty (30) days of the end of each month. Failure to submit a monthly report shall be sufficient cause for the department to revoke the current year's commercial fishing permit and deny renewal of the permit for the following year.

Under the Wildlife Code, the Missouri Department of Conservation has a duty to conserve native turtle populations in Missouri. 3 CSR 10-1.010. It also has a duty to protect endangered species under the federal Endangered Species Act, 16 U.S.C. § 1531, and a duty to enact effective state wildlife laws that discourage interstate commerce of illegally collected wildlife under the Lacey Act, 16 U.S.C. § 701. Consistent with these legal duties and authorities, the proposed rule amendment is intended to protect Missouri's turtle populations by ending unlimited commercial collection.

IV. CONCLUSION

Petitioners have summarized the harms caused by the commercial collection of wild turtles in Missouri. Specifically, Petitioners have demonstrated that wild turtles cannot withstand unlimited commercial collection without facing population declines. In addition, the wild collection of wild turtles to be sold for meat poses a human health risk because of contaminants. Because of the significant harm caused by unlimited commercial collection of turtles, most states have ended or are ending the practice, including all but one of the states bordering Missouri. Petitioners therefore request that the Missouri Department of Conservation adopt the proposed rule amendment and end unlimited commercial collection of wild turtles.

Consistent with Missouri Revised Statutes § 536.041.1, Petitioners request a written response to the petition within 60 days, which contains the Department's "determination whether such rule should be adopted, continued without change, amended, or rescinded, together with a concise summary of the state agency's specific facts and findings with respect to the criteria set forth in subsection 4 of section 536.175."

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Common Snapping Turtle

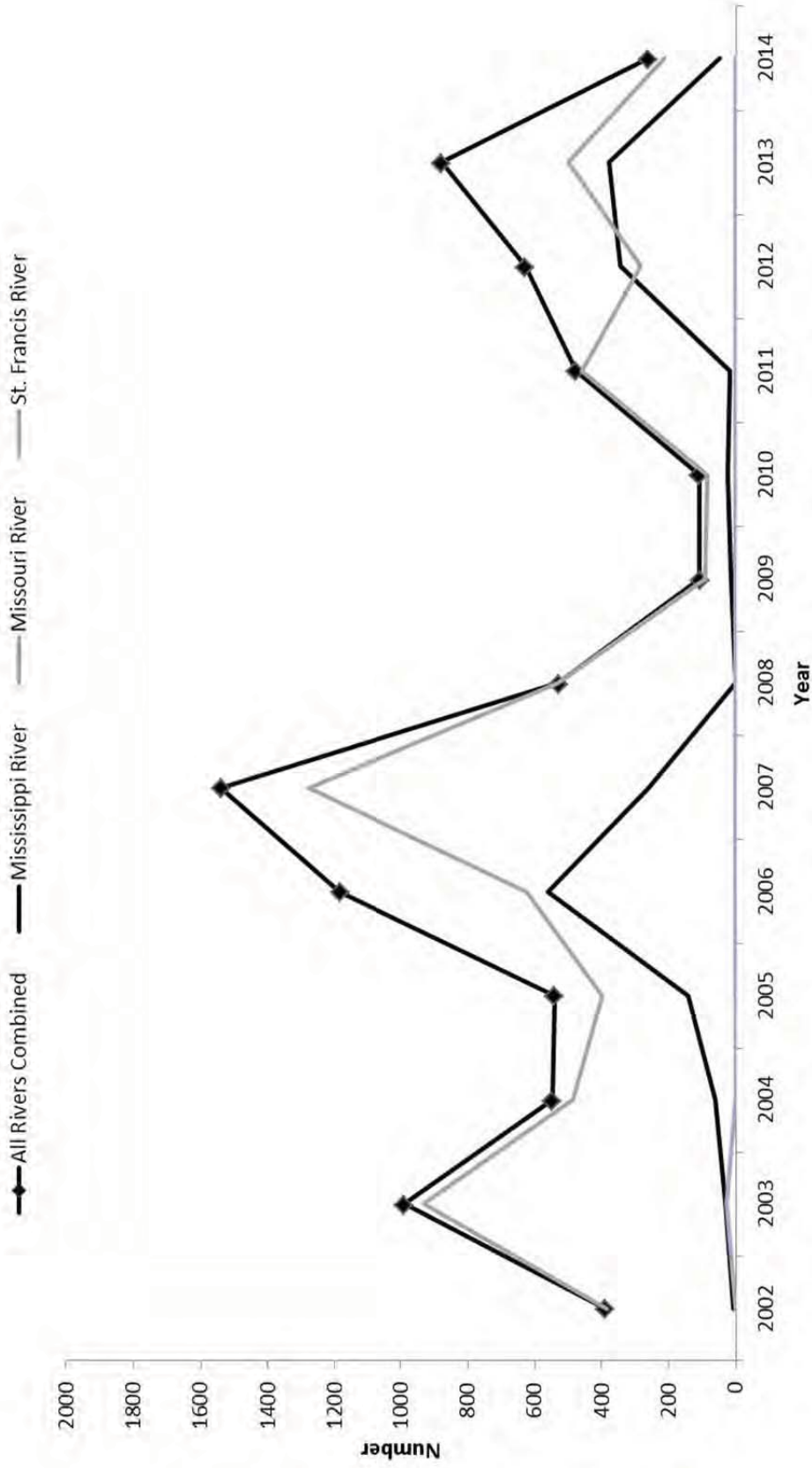


Figure 60: Number of common snapping turtles commercially harvested, by river and from all rivers combined, from 2002 to 2014.

Softshell Turtles

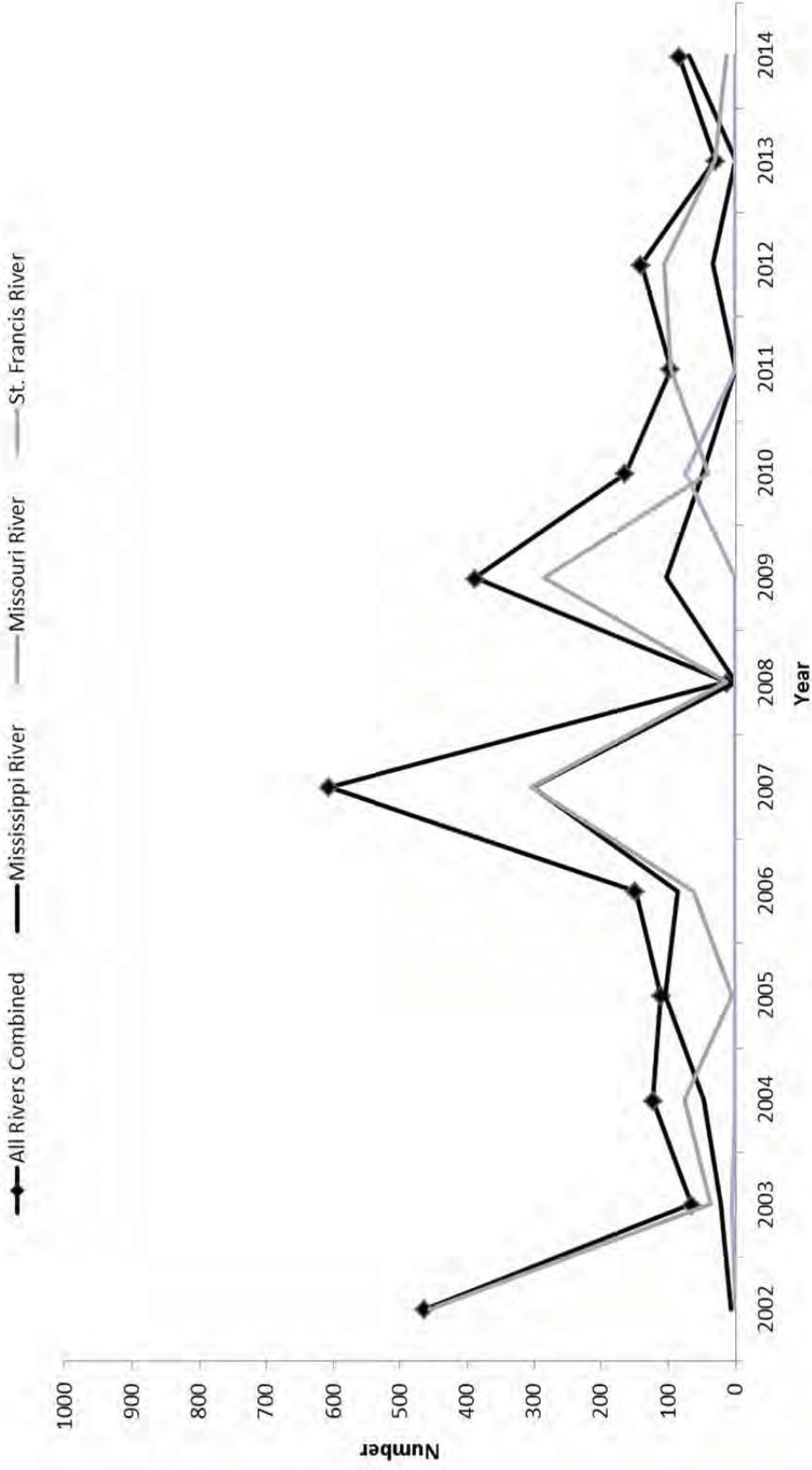


Figure 61: Number of softshell turtles commercially harvested, by river and from all rivers combined, from 2002 to 2014.