June 28, 2013

Sent via Email and U.S. Mail

Matt Hopkins
Kiwanis Club of Bel Air
P.O. Box 663
Bel Air, MD 21014
matthew.hopkins@wfadvisors.com

Re: Please Stop Using Wild-Caught Turtles at the Bel Air Turtle Race

Dear Mr. Hopkins:

On behalf of the Center for Biological Diversity, I am writing to express our concern about the turtle derby at the Independence Day event in Bel Air, Maryland. As explained below, turtle races threaten struggling native turtle populations by removing turtles from the wild and by spreading disease when collected turtles are returned to the wild. Turtle races also pose a threat to human health because turtles carry *Salmonella* bacteria and are handled by children, who may become ill from infection. Also, it appears that your turtle race may violate state wildlife protection laws, including the prohibition on releasing turtles into the wild after coming into contact with other turtles in captivity. We therefore encourage you to stop using wild-caught turtles at your event.

The Center for Biological Diversity is a national, nonprofit conservation organization with more than 500,000 members and online activists dedicated to the protection of endangered species and wild places.

Turtle Races Pose a Human Health Hazard

Turtle races may spread disease to the people who handle the turtles, including young children who are especially vulnerable. Turtles carry several diseases but the risk of infection by *Salmonella* bacteria is the major threat to human health.

Salmonella are naturally occurring bacteria in turtles, and infected turtles usually do not appear sick in any way (Center for Disease Control 2007a). *Salmonella* bacteria cause a human disease called salmonellosis, and reptiles, including turtles, transmit an estimated 74,000 cases of salmonellosis to people in the United States annually (Center for Disease Control 2007a). Some cases may cause severe illness, hospitalization and even death in susceptible people such as children under five, the elderly, and people who have lowered natural resistance to disease (Center for Disease Control 2007a).

For this reason, the Center for Disease Control recommends that children younger than five and immune-compromised people have no contact with reptiles (Center for Disease Control 2007b). The human health agency also recommends that humans handle reptiles in public settings only in designated areas that include adequate hand-washing facilities and that food and drink be prohibited near animal contact areas (Center for Disease Control 2007b).

It is our understanding that last year, the Bel Air turtle race included a hose and water trough for washing hands, but this is inadequate to stop the spread of bacteria as many children simply dipped their hands into the water and rubbed their hands on their clothes. But even if your turtle race did provide an adequate hand-washing station, it is very difficult to control the spread of the bacteria with young children kissing and petting their turtles, touching each other, and contaminating numerous surfaces. Contributing to the risk of infection, people eat food near the turtle races and participate in a watermelon-eating contest right after the race. In addition, in preparation for race day, children capture and then play with wild turtles that may be infected with *Salmonella*.

Turtle Races Threaten Native Turtle Populations

Disease Transmission

At the turtle race, turtles of various sizes and species from various geographic regions come into close contact with each other, which creates a risk of animal-to-animal disease transmission. If the turtles are released back into the wild, these diseases can spread and infect entire turtle populations. Of particular concern is the spread of upper respiratory infections and the deadly ranavirus, which are documented threats to wild turtle populations in many states (Allender et al. 2011, Johnson et al. 2008; Schumacher 2006; Diemer Berish 2000). Indeed, ranavirus has been detected in Maryland, and disease is a therefore a real threat to the local wildlife around Bel Air (Shaver 2012).

To prevent the spread of disease, many states – including Maryland – strictly regulate the release of captive reptiles into the wild. Yet most of the turtles caught for your turtle race are likely released in the wild, contributing to the spread of disease and the decline of native turtle populations, as well as other wildlife susceptible to these diseases, including salamanders and frogs.

Depleting Wild Populations

Populations of native turtles across the country and worldwide are declining due to threats like habitat destruction, road mortality, predation by raccoons and other human-subsidized predators, toxins, and collection for food and pets. In fact, scientists have recently estimated that nearly half of all turtle species are at risk of extinction (Böhm et al. 2013). Collection of wild turtles for turtle races only exacerbates the numerous threats that native turtle populations are facing.

Some of the turtles targeted by the Bel Air turtle race are considered species of “greatest conservation need” by the state of Maryland, including eastern box turtles and northern red-bellied cooters (Maryland Wildlife and Heritage Service 2005). Eastern box turtles are

considered “vulnerable” to extinction and listed on the IUCN Red List (van Dijk 2011). Multiple studies across the range of box turtles have documented declines (Ernst and Lovich 2009). In addition, Maryland provides habitat for the bog turtle, which is federally listed under the Endangered Species Act and state listed along with the northern map turtle (Maryland Wildlife and Heritage Service 2010). Maryland is also within the range of the wood turtle and spotted turtle, which are presently being considered for federal Endangered Species Act protection (Center for Biological Diversity 2012).

The Bel Air turtle race does not warn participants about collecting protected turtles, and most people collecting turtles for the turtle race nevertheless lack the ability to distinguish between the various turtle species. It is our understanding that rare turtles have been brought to the Bel Air turtle race, including wood turtles and the federally listed bog turtle. Collection of any endangered or threatened species is strictly prohibited and could subject violators to steep penalties or even jail time.

Some organizers of turtle races mistakenly believe that impacts to native turtle populations are minimal because most people return their turtles to the wild after the races. First of all, releasing turtles back into the wild after being exposed to other turtles in captivity is harmful because of the risk of spreading disease, as explained above. In addition, many turtles, especially box turtles, show high “site fidelity” and will attempt to travel long distances to return to their home ranges (Belzer 2002; Cook 2004; Hester et al. 2005; Hester et al. 2008). Therefore, released turtles are often hit by cars as they travel back home or suffer and die from weight loss and stress from their time in captivity.

Another myth is that the deaths of some turtles each year will have no effect on the wild turtle populations. Yet research has shown that some turtle populations cannot withstand even minimal human exploitation without undergoing a decline in numbers (Brooks 1988). For example, life-history models indicate that only slight increases (0.1) in annual adult mortality rate (such as from human collection) will cause a population of snapping turtles to be halved in under 20 years (COSEWIC 2008). Another study showed a 95 percent annual adult survival rate is needed for a stable population of ornate box turtles (Doroff and Keith 1990). Making matters worse, after depletion of turtle populations by humans, population recovery potential is low because turtles have delayed sexual maturity (Brooks et al. 1991). As such, scientists warn that freshwater turtles cannot sustain any significant level of human harvest from the wild without leading to population crashes (Congdon et al. 1993, 1994; Heppell 1998, Reed et al. 2002).

Turtle Races Can Subject Turtles to Inhumane Treatment

Inhumane treatment of turtles is another concern with turtle races. Sometimes people collect the turtles far in advance of the turtle race and inadequately house their turtles without access to bedding, food, or clean water. Turtles can be injured during transportation because many people bring turtles in deep buckets of water, which can lead to drowning or aspiration pneumonia. Turtles can be mishandled by people who hold them upside down, poke or shake them, or worse. To be sure, any handling of turtles – especially wild turtles – can be stressful for the turtles and cause elevated stress hormones, an increase in heart rate, and a rise in body temperature (Cabanac and Bernieri 2000). In addition, at the turtle races, turtles are often heat stressed, as

they are kept in the summer sun in boxes with poor ventilation and raced on warm surfaces. Surfaces can have ground temperatures of 125 degrees on summer days.

Turtle Races Result in Violations of State Wildlife Protection Laws

Maryland regulates the possession of turtles and other reptiles to protect native populations and human health (Maryland Wildlife Heritage Service 2013). By not adequately advertising rules that would restrict the types and numbers of turtles brought to the race, the Bel Air turtle race may facilitate violations of Section 08.03.11.04(C) of the Code of Maryland Regulations ("COMAR"), which prohibits the following activities without a permit issued by the Maryland Wildlife Heritage Service:

- Possession of any turtle with a shell length under 4 inches.
- Possession of more than one eastern box turtle, eastern painted turtle, midland painted turtle, eastern mud turtle, stinkpot or northern red-bellied turtle.
- Taking of any spotted turtles, wood turtles and diamondback terrapins from the wild.
- Possession of any state or federally listed turtles, including bog turtles and northern map turtles.

In addition, COMAR Section 08.03.11.10 provides that no wild turtles of any species that have had contact with another reptile (including turtles) in captivity can be released back into the wild without the explicit permission of the Maryland DNR, Division of Wildlife & Heritage. This regulation appears to be routinely violated as participants often release turtles back into the wild after their exposure with other turtles during the races.

In short, the potential for violations of Maryland law is yet another reason why the turtle race should stop using wild-caught turtles.

Alternatives to Using Wild-Caught Turtles

Many turtle racing events are switching to wildlife-friendly festivals with creative substitutes for wild caught turtles. Some events race rubber turtles down a stream. *See, e.g.*, http://turtlefestival.com/Ultimate_Turtle_Race.html (Belton, TX); http://www.eventsatcovenant.org/turtlederby (Mobile, AL). An event for seniors in Pennsylvania races aluminum pans decorated to look like turtles by attaching strings and pulling the "turtles" up a hill as the string is wrapped around a Popsicle stick. *See* http://www.inyork.com/local/ci_12690151 (York, PA). If you really want to use live turtles, consider using turtles loaned from a pet shop or biological supply house that have tested negative for *Salmonella* (but make sure that these turtles are humanely treated during transport and on race day). *See* http://www.hopkinschildrens.org/Johns-Hopkins-Annual-Turtle-Derby.aspx (Baltimore, MD).

For all these reasons, we ask that you reconsider using wild caught turtles at the Bel Air annual turtle race. The participants and audience would have just as much fun using one of the many alternatives that could transform your event into a wildlife-friendly festival.

If you have any questions or would like to discuss further, please do not hesitate to contact me at 651-955-3821.

Sincerely,

Collette L. Adkins Giese
Amphibian and Reptile Staff Attorney
Center for Biological Diversity

Cc (by email):
Scott Smith, Maryland Department of Natural Resources: sasmith@dnr.state.md.us

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