

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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## Assessment of Public Comment on the Management Plan for Mute Swans in New York State, Third Draft

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DEC released the Third Draft Management Plan for Mute Swans in New York State on September 6<sup>th</sup>, 2017 for public comment. The most recent draft contains significant changes in response to comments received on the previous two versions.

Following the plan's release, DEC held a public comment period from September 6<sup>th</sup> through December 13<sup>th</sup>, 2017. In addition to accepting written comment, DEC held three public hearings in areas affected by mute swans. DEC received several hundred written comments and verbal comments from 38 private citizens, organizations, and elected representatives. Many of the comments received referred to previous versions of the draft plan that called for eradicating mute swans in all of New York State (eradicating swans from the State was not proposed in the third draft). DEC responses to comments that referred to previous drafts, or redundant comments to those previously addressed by DEC, can be found on DEC's website at: <http://www.dec.ny.gov/animals/7076.html>. Below is a summary of all new substantive comments on the 3<sup>rd</sup> draft management plan and the Department's response to each.

*Comment:* The third draft contains vague language on lethal removal and population goals. The ambiguous language makes it possible that mute swans could still be eliminated from the state.

*Response:* Achieving a specific population target is difficult due to the environmental variability that results from immigration and emigration of animals, changes in reproductive success and survival, and weather, so the draft plan proposed controlling range expansion upstate and population stability downstate. Complete elimination of swans from New York was never the goal of the third draft of the plan. Despite the challenges associated with managing for a specific number of swans, DEC has modified the final plan to be more explicit about population objectives, both upstate and downstate. In the upstate region, DEC will seek to stabilize mute swan populations at approximately 175 swans along the Lake Ontario embayments and Hudson River (excluding portions of the Hudson River in the downstate region) and 2,100 swans downstate. The population objectives for upstate and downstate are approximately the mean of the 2011, 2014 and 2017 mid-summer swan counts. Downstate, where the population is relatively stable and likely close to carrying capacity, the plan employs a

largely hands-off approach to management and any management that does occur will focus on non-lethal methods (e.g., egg oiling). In the event the upstate population objective is reached, DEC will restrict management actions to site-specific situations involving human health and safety.

As indicated in the 3<sup>rd</sup> draft and final management plans, DEC has committed to increasing the surveying frequency from every three years to every two years to assess population changes over time. This frequency was selected to be sensitive to population swings as a result of management efforts. Given the modest control efforts (removal of less than 100 individuals per year) prescribed by the final management plan, coupled with any level of natural reproduction, biennial surveys are sufficient to monitor population trends and to ensure mute swan populations in both management regions are maintained at the prescribed levels.

Regarding the use of lethal removal techniques, the plan is explicit that staff will exhaust all reasonable non-lethal alternatives prior to resorting to lethal removal. Each individual situation staff may encounter is different and applying blanket rules to how all situations will be handled is unreasonable. However, DEC has included language in the final version that outlines efforts to develop standard operating procedures for staff dealing with nuisance mute swans to ensure consistency in agency response across both management regions.

*Comment:* Several comments referenced a recently released, non-peer reviewed, literature review, written by Hudsonia L.L.C. and funded by Grant & Lyons LLP (<http://www.pegasusfoundation.org/assessing-potential-ecological-effects-of-mute-swan-cygnus-olor-expansion-in-northeastern-north-america/>), as evidence DEC's Mute Swan management plan is not scientifically sound.

*Response:* The Hudsonia report explicitly states it is not a review of DEC's management plan: "Hudsonia is not supporting or opposing mute swan management in general, or any particular management proposal or plan."

In addition, the Hudsonia literature review acknowledges several key management concerns referenced in DEC's management plan such as the potential impacts of mute swans on submerged aquatic vegetation, aggression of swans towards state threatened species or species of special concern causing nesting colony abandonment (least terns, common terns, black skimmers), incidents of aggression of swans towards people and pets, the potential threat of swans to aviation, and the potential of mute swan populations to grow rapidly in the absence of management.

***Hudsonia report on the negative effects of mute swans on public safety and the environment***

"Mute swan territorial defense directed against humans can prevent the use of shores and waterways for recreation... Mute swan attacks on children, adults, elderly adults, and dogs, as well as fatal attacks on domestic waterfowl, have been reported in Rhode Island and Connecticut (State of Rhode Island 2006). In one instance, a man drowned when his boat was overturned in a mute swan

attack (“Who, What, Why: How Dangerous Are Swans?” 4/17/2012; <http://www.bbc.com/news/magazine-17736292>; Accessed 9/21/2017)...In Europe, mute swans sometimes graze croplands or pastures in winter or spring, resulting in economic losses (Wood et al. 2013a). Because of their large size, mute swans pose an aviation hazard in the event of collision with an aircraft; three such collisions have been reported from JFK Airport in New York despite active management of swans on the airport property (NYSDEC 2017). Swans (as well as geese) can raise fecal coliform levels in waterbodies where they congregate in large flocks (Hussong et al. 1979). “

“Mute swan is a highly adaptable species – it has expanded greatly in recent decades, both in Europe and in North America, with the potential for continued expansion in both distribution and density. Native North American swans, although in general less adaptable, are also rapidly expanding in distribution and abundance, and will likely become competitors for breeding (trumpeter) and migratory stopover and overwintering resources (trumpeter and tundra) in the Northeast.”

“Waterbirds—including rare least tern and black skimmer— that nest on small, sandbar islands have locally suffered nest loss and abandoned nesting colonies due to summer flocks of mute swans.”

### ***Hudsonia report on mute swan population projections***

“Regional growth rates in the Atlantic Flyway between 1986 and 1999 ranged from 43% in New England (mostly in Massachusetts, Rhode Island, and Connecticut) to 62% in the upper Mid- Atlantic states (mostly in New York, New Jersey, and Pennsylvania) to 1271% in the Chesapeake Bay Region (Maryland and Virginia; Costanzo et al. 2015). At more local scales, mute swan populations may double every five years in the initial growth phase after establishment, but then population growth slows after 25-30 years due to density dependence (Ellis & Elphick 2007).”

Additionally, as stated in the [2<sup>nd</sup> response to public comment](#): “We further disagree with those who claim that the scientific basis for the plan was flawed in several respects. First, is that ecological research does not have to be conducted in New York to be applicable; studies conducted elsewhere may often be relevant and appropriately extrapolated to New York – this is a fundamental concept of the scientific method. Second, is that mute swan impacts are not absolute; the plan readily acknowledges that impacts vary widely depending on the number of birds, their individual behaviors, and the environmental circumstances where they occur. This variability and uncertainty is supported by the scientific studies that we reviewed, including our own research in New York; anecdotal observations by many who commented on the plan do not change that conclusion. It is well-documented that, in some cases, mute swans do have significant

impacts on submerged aquatic vegetation (SAV) or other wildlife, and in others they do not. Likewise, some mute swans will vigorously defend a territory, whereas others may tolerate other waterfowl or humans coming in close proximity. Consequently, we disagree that further research is needed. Such research would be extremely expensive if required to evaluate every site-specific situation, and it would likely not convince those who do not feel mute swans should be managed under any circumstance, whether it be adverse environmental impacts or conflicts with humans.”

*Comment:* Many comments suggest there are other, more important environmental stressors that impact submerged aquatic vegetation (SAV).

*Response:* As stated in the [2<sup>nd</sup> response to public comment](#): “We agree that there are many environmental problems that impact air and water quality, fish and wildlife habitats, and public health. DEC spends far more time and energy on large-scale (e.g., climate change, storm water runoff) and local (e.g., hazardous waste sites) problems that directly affect public health and quality of life for the citizens of New York than on mute swans. DEC is a large organization with broad authority to address the full array of environmental challenges, with an annual budget of approximately \$900 million...the Division of Fish and Wildlife (DFW) has an annual budget of approximately \$45 million, and DEC seeks to use its Fish and Wildlife program funding and authority to help address environmental problems that may be caused, at least in part, by fish and wildlife that it oversees, with due consideration for priorities. The expected costs associated with management of mute swans is appropriately small, but will make a large difference in their potential impacts on the natural resources and people of the state by preventing further expansion of the mute swan population in the future.”

*Comment:* Some comments suggested swans do not pose a risk to water quality.

*Response:* The impact of swans on water quality is highly variable. However, as bird populations grow, be they swans, geese, or gulls, there is likely to be an impact on water quality ([Fleming and Fraser, 2001](#)). Nevertheless, prior to swans being removed with the specific goal of improving water quality, management would not occur until a public health entity or an agency responsible for protecting public drinking water determines there to be a public health threat. The final plan has been modified to reflect consultation with public health and/or drinking water agencies.

*Comment:* Some comments suggested swans do not pose a threat to native wildlife like nesting waterfowl and other waterbirds. Swans have been observed co-existing with other waterfowl.

*Response:* The impact of swans on native wildlife is variable depending on the location and swan numbers; however, swans have been documented to exclude native water birds from nesting in some areas (Therres and Brinker 2004).

DEC has a responsibility to protect native wildlife, particularly at-risk species such as terns that may be particularly vulnerable to environmental stressors like non-native invasive species.

*Comment:* Some comments suggested the risk to drinking water supplies and the subsequent DEC response was not sufficiently addressed in the plan. Specifically, one commenting New York City agency suggested DEC prohibit releasing rehabilitated mute swans back into the wild (both upstate and downstate), manage mute swan populations more aggressively in areas near drinking water reservoirs (both upstate and downstate), and incorporating harassment of mute swans into its best management practices to alleviate concerns on public drinking water reservoirs.

*Response:* DEC agrees with these comments and concerns with the exception of how to address mute swan rehabilitation. As indicated in the response to previous comments about public health threats, DEC will rely on public health entities and agencies responsible for protecting water supplies to decide on the appropriate non-lethal (harassment, egg addling, or capture and placement) or, when necessary, lethal response. The final version of the management plan addresses these concerns.

With respect to mute swan rehabilitation, DEC records indicate very few mute swans are rehabilitated (fewer than 5 per year). A complete prohibition of mute swan rehabilitation is unwarranted at this time. Wildlife rehabilitation licenses and the final mute swan plan reflect changes to allow mute swan rehabilitation, so long as, upon successful rehabilitation, the bird is released back to the place it was captured or is placed in a licensed captive facility.

*Comment:* Some comments suggested egg oiling/addling in the downstate region would eventually lead to significant population declines.

*Response:* Studies by [Ellis & Elphick \(2007\)](#) and [Wood et al. \(2013\)](#) both suggest egg oiling alone is insufficient to achieve significant population reductions. Furthermore, DEC's management plan calls for opportunistic egg addling/oiling to address site-specific concerns. The actions prescribed in the downstate region are insufficient to have population-level impacts. They are designed to maintain the population at a stable level and mitigate site-specific damage and conflicts with recreational user groups.

Nevertheless, if non-lethal management actions caused mute swan populations to decrease below the regional population objectives, either upstate or downstate, DEC would limit permitted activities to incidents involving human health and safety.

*Comment:* Many commenters suggested resident Canada geese are a more pressing issue and questioned why DEC does not actively manage their populations. There are only about 2,000 swans in all of New York State, but over 200,000 Canada geese.

*Response:* As stated in the [2<sup>nd</sup> response to public comment](#): "DEC is well aware of the impacts of Canada geese on the quality of the environment and quality of life for many people throughout the state, and has devoted much time and energy trying to help resolve those problems over the past 25 years or more. Much information is available on the DEC website for people seeking understanding and options available to alleviate the impacts of Canada geese. Regulations have been modified to streamline the

permitting process for property owners and communities to take aggressive action, including lethal and non-lethal techniques, to reduce the abundance and impacts of geese. At the same time, hunting regulations have been liberalized to the maximum extent allowed by federal law, resulting in an annual harvest by New York hunters in excess of 100,000 geese, which has helped to stabilize the statewide breeding population at about 225,000 birds. This is still far above the goal of 85,000 birds that DEC believes would provide a much better balance between the costs and benefits of our resident goose population. Furthermore, the pervasive impacts of Canada geese do not reduce the need to properly manage the negative impacts of mute swans. The appropriate management of both species is necessary to improve the habitat quality of many wetlands that have been greatly impacted by either or both species.”

*Comment:* Many comments suggested the mute swan population in New York State has been decreasing, even without any management.

*Response:* From 2009 to 2013, available data indicate that the mute swan population declined, likely due to severe winter conditions during that period. From 2014 to present, in the absence of management, the population has continued its long-term increase, especially in the more recently colonized areas of upstate New York. Recent mute swan surveys clearly demonstrate how populations have increased at an alarming rate in the Lake Ontario region of New York. During the 2014 Atlantic Flyway August Swan survey, staff counted 39 mute swans along the Lake Ontario shoreline and embayments. After 3 years of minimal, non-lethal control efforts the population along Lake Ontario has rebounded to 199 birds, including 63 cygnets.

Even in New York City and Long Island, where mute swans are likely at or near biological carrying capacity, the population has slightly increased between 2014 and 2017 (from 1,453 to 1,668 swans).

*Comment:* The plan does not specify how many swans will be killed every year and does not reference any required training for staff.

*Response:* The plan establishes an estimated number of swans that DEC could potentially remove in a year. Specifying a number to be killed each year would be irresponsible as DEC needs to be responsive to changes in the population, either increasing or decreasing. With clearly defined population objectives, the number to be removed each year will be justified based on current population estimates. As outlined in the Final plan, removals will be targeted to prevent range expansion and population growth in the upstate region. The goal is not to eliminate mute swans in either the upstate or downstate regions. If population objectives are achieved, lethal removal will only occur in situations involving human health and safety.

Regarding training, DEC staff are regularly trained by the Division of Fish and Wildlife's Wildlife Health Program in conjunction with Cornell University College of Veterinary Medicine. Training covers methods to humanely euthanize wildlife and all methods meet the criteria outlined by the American Veterinarian Medical Association for humane euthanasia. Prior to responding to nuisance situations, all staff are adequately trained to

ensure humane treatment of the animal, to ensure worker safety, and to employ the appropriate response to the varied situations encountered in the field.

*Comment:* If 100 swans are removed every year, eventually there won't be any swans left in New York.

*Response:* As stated above, the plan establishes an estimated number of swans that could potentially be removed in a year. The number of mute swans in New York, particularly in the upstate region, is not static as new swans are produced annually. The number of swans that could be removed is insufficient to offset both the number of adult swans and the offspring they produce on an annual basis. The objective upstate is to restrict population expansion and maintain a population of roughly 175 birds. Downstate, where swans are at or close to carrying capacity, a more "hands-off" approach (e.g., egg oiling) will be taken to maintain the swan population at the current level (about 2,100 birds).

Again, if management actions caused mute swan populations to decrease below the regional population objectives, either upstate or downstate, DEC would limit permitted activities to incidents involving human health and safety.

*Comment:* DEC does not provide specific details of complaints received about aggressive mute swans. DEC should not assert that there is a mute swan-human conflict problem in the state based solely on anecdotal information.

*Response:* DEC has an obligation to be responsive to reports of aggressive swans. Typically, DEC will schedule a site visit and confirm aggressive actions by swans prior to removing a bird (both non-lethally or lethally) or issuing a permit to capture and remove or euthanize the aggressive bird. Mute swans are a large, intimidating bird. The results of the interaction could be deadly for the person being pursued by an aggressive swan - especially when the interaction occurs on the water (i.e. a kayaker being attacked by a swan in the spring or fall). As described in the final plan and previous iterations, DEC will conduct public outreach to potentially mitigate potential negative interactions; however, some situations are unavoidable and will need to be addressed.

*Comment:* DEC should amend the legal status section to include discussion of the restrictions and obligations because of the law signed by Governor Cuomo, November 28, 2016.

*Response:* DEC agrees and has revised the legal status section to reflect the new legislation.

*Comment:* The third draft of the management plan does not comply with the legislation signed into law November 28, 2016 requiring DEC to:

- 1) hold a minimum of 2 public hearings in areas with mute swan populations, following adequate public notice;
- 2) allow public comment for a minimum of 45 days after the last public hearing;
- 3) give priority to non-lethal management techniques;
- 4) fully document the scientific basis for future population projections;
- 5) fully document the scientific basis for current and projected environmental damage;
- 6) include a public education component;
- 7) and include responses to all substantive public comments.

*Response:* DEC disagrees that it has not complied with all aspects of the referenced legislation. In fact, DEC has undertaken all of the following mandated requirements:

- 1) DEC held 3 public hearings in areas affected by mute swans
  - i. Tuesday, October 3, 2017 at 6 p.m.  
Braddock Bay Pavilion  
199 E. Manitou Road  
Hilton, NY 14468
  - ii. Thursday, October 19, 2017 at 6 p.m.  
Region 3 NYSDEC  
21 South Putt Corners Road  
New Paltz, NY 12561
  - iii. Thursday, October 26, 2017 at 6 p.m.  
Suffolk County Water Authority Education Center  
260 Motor Parkway  
Hauppauge, NY 11788
- 2) DEC held a 98-day public comment period from September 6, 2017 through December 13<sup>th</sup>, 2017.
- 3) The final mute swan management plan gives priority to non-lethal management techniques in all areas of New York State.
- 4) The final mute swan management plan and the 2013 "Status and Ecology of Mute Swans in New York State" fully documents the scientific basis for future population projections. Further, DEC subsequently released a 2017 population survey that documents how mute swan populations have continued to grow at an alarming rate in the absence of active management (<http://www.dec.ny.gov/animals/7076.html>).
- 5) The final mute swan management plan uses the best available scientific data and research to fully document the scientific basis for current and projected environmental damage. Extensive research and the latest available data was included in the latest draft to document the scientific justification for the management actions proposed in the plan. Additionally, new research would be redundant and come at a great expense to New York State, all while providing little new information to help guide management decisions. Site-specific decisions on appropriate DEC responses will be based on observed damage in the field and best professional judgment.
- 6) As required, DEC emphasized Part 1 of the final mute swan management plan which describes an integrated approach to educating the public on the potential impacts of mute swans and DEC management strategies to address the public's concerns;
- 7) This Assessment of Public Comment is DEC's compliance with the law.



The stated purpose of the legislation was to impose restrictions on the eradication of the mute swan population (<https://www.nysenate.gov/legislation/bills/2015/s6630/amendment/original>); since the 3<sup>rd</sup> draft of the mute swan plan proposes to maintain mute swan populations, both upstate and downstate, DEC has complied with the purpose and specific provisions of the legislation.

*Comment:* DEC states every three years a mute swan survey is conducted, but the plan relies on survey data that is almost 10 years old.

*Response:* DEC has released the results of a comprehensive 2017 Summer Mute Swan Population Survey (<http://www.dec.ny.gov/animals/7076.html>). DEC has committed to replicating the 2017 survey efforts every two years to assess population growth or contraction. This survey data has also been incorporated into the final mute swan management plan.

*Comment:* DEC does not sufficiently outline legal hurdles to establishing a hunting season, and hunting mute swans should not be allowed under any circumstances.

*Response:* As stated in the plan, Environmental Conservation Law 11-0103(2)(a)(1) includes swans in the definition of “migratory game birds”; therefore, DEC has the legal authority to establish open hunting seasons.

However, in response to comments from both hunters and non-hunters, DEC has removed the section that described future work evaluating the utility of allowing recreational harvest of mute swans from the plan.

*Comment:* DEC is in violation of its own invasive species regulations when it releases thousands of non-native, invasive Hungarian chukar, and ring-necked pheasants for hunting, and brown trout for fishing.

*Response:* Part 575 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York do not list the Hungarian partridge, chukar, ring-necked pheasant, or brown trout as regulated or prohibited invasive species. These species were included in the technical review by DEC staff that informed the development of the invasive species regulations and it was determined that, while these species are non-native, they are not truly invasive and do not have detrimental ecological, environmental, or economic impacts. DEC raises and releases ring-necked pheasants and brown trout for recreational hunting and fishing opportunities; the agency does not raise and release Hungarian partridge or chukar.

The full list of regulated and prohibited invasive species can be found on the DEC website: <http://www.dec.ny.gov/animals/99141.html>.

*Comment:* DEC is in violation of National Environmental Policy Act and State Environmental Quality Act (SEQRA) obligations, and an Environmental Impact Statement is required.

*Response:* The National Environmental Policy Act (NEPA) requires federal agencies and their partners to assess the environmental effects of their proposed actions when federal funds are used. The Mute Swan Management Plan and associated actions are covered by NEPA 516 DM 6, categorical exclusion 1.4B(1) related to resource management.

With respect to compliance with SEQRA, all agency actions described in the final mute swan management plan are covered by the 1980 Division of Fish and Wildlife Programmatic Environmental Impact Statement for the Wildlife Game Species Management Program, and the subsequent supplemental Environmental Impact Statement issued in 1994.

*Comment:* DEC is in violation of international law because the Migratory Bird Treaty Reform Act of 2004 was improperly passed through Congress and therefore unlawful.

*Response:* DEC has confirmed that the Migratory Bird Treaty Reform Act of 2004 was lawfully passed as part of the 2005 Consolidated Appropriations Act. In December of 2006 the U.S. District Court for the District of Columbia upheld the Reform Act as written, affirming mute swans are not protected under the Migratory Bird Treaty Act. For more information, see the court's ruling: [Fund for Animals v. Kempthorne](#) et al.

*Comment:* There are only approximately 2,000 mute swans spread out over 50,000 square miles, for a density of just 0.04 per square mile; therefore, the problem is being overstated.

*Response:* Mute swans do not evenly distribute themselves across the landscape. If mute swan populations were indeed evenly distributed at a density of just 0.04 per square mile, DEC would agree the impacts on the environment and people would likely be minimal. However, wildlife populations are inherently unevenly distributed. This is especially true of mute swans, as documented by DEC in the most recent summer swan survey ([link](#)). For example, on Mecox Bay, Suffolk County, New York, DEC counted 148 swans. The bay is approximately 1.7 square miles for a density of approximately 87 swans per square mile. Under these conditions, there is little doubt mute swans can have negative impacts on the habitat quality and people.

*Comment:* There is no evidence to suggest mute swans pose a risk to aviation.

*Response:* DEC disagrees and has previously addressed this comment that was also received on the previous draft management plan:

“Where mute swans occur near airports, they pose a serious threat to aviation, as even a single aircraft collision with a swan could result in a disaster. Since 2000, there have been three documented mute swan strikes in the U.S., all at JFK International Airport (one in 2010 and two in 2011). Although the number of strikes at airports has been small, this might have been higher without active management efforts to minimize the potential for bird strikes. At JFK, for example, Port Authority and USDA Wildlife Services personnel removed a total of 35 mute swans from airport property during 2011-2015 to protect aviation safety. Many other mute swans were hazed off of airport property during that same period as part of a comprehensive bird hazard management program. Although the revised mute swan management plan does not call for an overall reduction in the downstate mute swan population, it allows such site-specific control measures to be conducted as necessary to minimize hazards to public safety.”