

The Bird Flu: What You Need to Know



NJ Department of Environmental Protection Division of Fish and Wildlife

The highly pathogenic H5N1 avian influenza virus has never been found in New Jersey or North America, but your help is needed for tracking this virus. If you find sick or dead birds, do not handle them. Report dead birds to the USDA – Wildlife Services at (866) 4-USDA-WS

Background

Highly pathogenic avian influenza type H5N1, commonly called “bird flu,” is a virus which can be deadly to birds, particularly poultry. Bird flu has received much media attention since the virus also affects humans in portions of Asia and Africa. There are many strains of this virus, each classified as “low pathogenic” or “highly pathogenic,” referring to the potential for the virus to kill birds, not to infect people.

Avian influenza viruses persist in cool, moist environments such as wetlands. Wetland birds like waterfowl, shorebirds and gulls are considered a natural reservoir for many avian influenza viruses. In waterfowl, the occurrence of low pathogenic virus strains peaks in late summer and early fall but the birds rarely develop debilitating signs. In shorebirds, the peak occurrence of low pathogenic virus exposure occurs during spring migration.

Reports of H5N1-infected birds in Asia, Europe and Africa have increased since this strain was first confirmed. It is found mainly in poultry and wild birds, but may occur in some mammals. Despite a significant surveillance effort in domestic and wild birds, to date the highly pathogenic H5N1 virus has not been found in North America.

What surveillance efforts are being done to detect Bird Flu?

Federal and state agricultural and wildlife agencies will continue to conduct continent-wide surveillance for the highly pathogenic H5N1 virus. Tens of thousands of wild bird and environmental (water and fecal) samples are tested each year. In 2008, more than 60,000 wild birds and 25,000 fecal samples were tested nationwide.

New Jersey Division of Fish and Wildlife is working in cooperation with the U.S. Department of Agriculture - Wildlife Services and the U.S. Fish and Wildlife Service to monitor wild birds. Emphasis in wild bird surveillance will be on wetland migratory birds, particularly waterfowl.

Waterfowl hunters play a key role in surveillance. Hunters may be approached by various wildlife agency staff at key hunting sites with a request to take samples from harvested birds. Most samples are taken via swabs from the cloaca and mouth of harvested birds. Bird mortality events suggestive of avian influenza will also be investigated.

Information For Hunters

Although the highly pathogenic H5N1 virus is mainly a poultry disease, wild birds appear to play some role in its spread. Currently there is little evidence that hunting dogs can contract the virus. Dog owners should consult their veterinarian for more information about influenza in pets. The risk to hunters appears low, but much is still unknown about this virus. Hunters can take reasonable steps to minimize their chance of contracting any potential bird virus.

Precautions for Handling Harvested Wild Birds

- ✓ Do not handle or consume game animals that are obviously sick or found dead.
- ✓ Wear rubber gloves when cleaning birds.
- ✓ Do not eat, drink or smoke while cleaning birds.
- ✓ Keep your hands away from your face and mouth when cleaning birds.
- ✓ Wash your hands with soap and water immediately after handling birds.
- ✓ Disinfect your work area and knives with a 10% bleach solution.
- ✓ Cook birds completely. The juices should be clear with no pink meat. Use a meat thermometer to ensure the internal meat temperature has reached a minimum of 165° F.

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Northern Bobwhite Research Guides Management Actions

**By Andrew Burnett, Principal Biologist
and Paul M. Castelli, Research Scientist II**

In response to the long-term decline in New Jersey's bobwhite population, Division of Fish and Wildlife biologists and partners from two universities have conducted several studies in recent years. These studies used a variety of scientific technical equipment and sophisticated laboratory analyses designed to uncover clues surrounding the bobwhite's failure to thrive. Together, these study results provide a clear picture of the major limiting factors effecting bobwhite and the most effective ways to influence this bird's survival.

From 2006 through 2008, University of Delaware graduate students Bridget Collins and Michael Lohr conducted year-round radio telemetry studies in Cumberland County, New Jersey, to track the movements of radio-tagged bobwhite. Their results indicate that bobwhite reproduction is good, with 14.2 eggs per nest and an overall nest hatch rate of 45 percent. Unfortunately, the research also demonstrates that the annual adult survival of radioed bobwhite is very low. The estimated annual survival rate is only nine percent, not enough to sustain the bobwhite population (Collins 2008, Lohr 2008). *This low adult survival is the primary explanation for the continued downward trend in New Jersey's bobwhite population.*

During the telemetry studies, the primary cause of bobwhite mortality (causes of death) was predators—both avian (hawks, owls) and mammalian, including house cats. Hunting was a relatively small, yet significant factor. All mortality

factors contribute to the bird's current low survival rate and each are influenced by the quality of bobwhite habitat.

In good quality habitat, bobwhite have all their life needs met such as food, water and shelter. Such habitat would afford protection from predators—including



Radio-telemetered male (L) and female (R) northern bobwhite in Cumberland County.

hunters—and support surviving periods of severe winter weather. In poor habitat, bobwhite are at greater risk to predators and severe weather. Unfortunately, the early successional habitats (such as grasslands and scrub-shrub lands) preferred by bobwhite have decreased greatly in recent years.

A scientific model to predict where suitable bobwhite habitat exists in New Jersey was developed by Fish and Wildlife Biologist Gretchen Fowles with the Endangered and Nongame Species Program. Using Geographic Information Systems software Fowles examined the habitat patterns surrounding known bobwhite locations in southern New Jersey. A model was developed that predicts there should be 800,000 acres of suitable bob-

white habitat in New Jersey south of Rt. 33 (Fowles et al. 2008). However, further field work by Fish and Wildlife biologists estimate only 18 percent of this acreage is occupied by bobwhite. The low occupancy rate is likely caused by the fragmentation of bobwhite habitat resulting from urbanization, maturing forests, and “clean farming” practices—all of which reduce the amount of—and connections between—habitats suitable for bobwhite.

Not surprising, Fish and Wildlife research showed bobwhite prefer areas with greater than 10 percent grassland that are interspersed with forest edge, shrub and barren areas. Large blocks of forest, wetland or any urban land use are negatively-associated with bobwhite presence.

It is not unusual for a bobwhite population in a particular area to occasionally experience extirpation (a local extinction). The smaller an area of habitat, the more likely that bobwhite will become extirpated. Normally bobwhite from adjacent, connected habitats would move in and repopulate the area since these birds have a high reproduction rate. However, bobwhite do not travel far, so when these local pockets of habitat are not connected to other existing habitats, it is much less likely that bobwhite will discover and repopulate that available land. As the size—and quality—of habitat patches shrink and the distance between the fragmented land grows, the bobwhite population becomes more likely to experience these local extinctions—and less able to repopulate.

Blueprint for Bobwhite

The Northern Bobwhite Conservation Initiative provides a national blueprint for bobwhite restoration and will be an important management resource for bobwhite recovery at both the national and local levels (Dimmick et al, 2002). Fish and Wildlife biologists, the N.J. Fish and Game Council, along with representatives from conservation and sporting groups interested in bobwhite, participated in a Northern Bobwhite Conservation Initiative workshop at the University of Delaware in May 2009 to identify priority areas for bobwhite habitat improvements in New Jersey. Subsequently, Fish and Wildlife met with local partners and selected Cumberland County as New Jersey's first focal area for bobwhite habitat restoration. Fish and Wildlife is committed to working with all interested parties in making bobwhite recovery a reality. Further information on how you can help make a difference will be posted on Fish and Wildlife's Web site as it becomes available.



From left to right: Paul Castelli (Research Scientist, NJ Division of Fish and Wildlife), Don McKenzie (National NBCI coordinator), Larry Herrigty (Assistant Director, NJ Division of Fish and Wildlife), William Palmer (Tall Timbers Research Station), Joe Matter (NJ Quail Project), Dr. Christopher Williams (Univ. of Delaware), and Jeanette Vreeland (Acting Chair, NJ Fish and Game Council).

An additional research goal was to develop a new technique to distinguish wild from pen-raised bobwhite. Using feather samples from known populations, Fish and Wildlife scientist Paul Castelli, along with Dr. Lisa Reed from Rutgers University, discovered that ratios of carbon and nitrogen isotopes in the feathers of wild versus pen-raised bobwhite are distinct, presumably due to their different diet. This chemical difference provides a method to ensure that recently liberated, pen-raised birds are excluded from field studies of wild bobwhite.

Currently, bobwhite survival is not sufficient to sustain the population. Population models identify management of winter mortality, which includes hunting mortality, as a critical portion of annual survival (Sandercock et al. 2008). Improved habitat conditions will make the greatest possible contribution toward increased winter survival rates, but will take years to accomplish. Reducing hunting mortality is also being re-examined by Fish and Wildlife biologists and the Fish and Game Council as another strategy to move bobwhite from a declining population to one that is increasing.

Ultimately, habitat limitation is the cause of bobwhite decline and is therefore the primary means by which the bobwhite population can recover. Many acres of habitat improvements—focusing on the quality, quantity and *connectedness*

of habitats—will be required to improve year-round bobwhite survival. ♪

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New Jersey Quail Project

habitat wildlife stewardship



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A SUMMARY OF the migratory bird regulations, below, are confirmed from the U.S. Fish and Wildlife Service and will be published in the *New Jersey 2009–10 Migratory Bird Regulations* booklet available in September at license agents, Fish and Wildlife offices and on the Fish and Wildlife Web site at NJFishandWildlife.com. **Migratory bird season dates published in the *Migratory Bird Regulations* booklet supersede those printed in this *Digest* if there are discrepancies.**

Migratory Bird Seasons

Season	Area	Dates	Daily Bag Limit
September Canada Goose*	Statewide	Sept. 1–30	15
Light Goose Regular Season	Statewide	Oct. 14 – Feb. 15	15, singly or in aggregate to include greater/lesser snow goose and Ross' goose
Light Goose Conservation Order**	Statewide	Feb. 16 – April 10	None; includes greater/lesser snow goose and Ross' goose
Rail and moorhen	Statewide	Sept. 1 – Nov. 8	Sora & Virginia rail: 25 total or aggregate; moorhen and clapper rail: 10
Sea Duck	Special Sea Duck Area	Sept. 24 – Jan. 26, 2010	7, except no more than 4 scoters
Snipe	Statewide	Sept. 18 – Jan. 2, 2010	8
Crow (Mon., Thurs., Fri., Sat.)	Statewide	Aug. 10 – Mar. 20, 2010 (Except closed Dec. 6–13)	No limit
Woodcock	North Zone	Oct. 15 – Nov. 7	3
	South Zone	Nov. 7–28 & Jan. 1–2, 2010	
Mourning Dove	Statewide	Closed	No Season
Youth Waterfowl Hunting Days	North Zone	Oct. 3	As for regular season for all species
	South Zone	Nov. 6–7	
	Coastal Zone	Oct. 31	

* See special regulations only for September Canada goose hunting, page 73.

** See special regulations for Light Goose Conservation Order, at right.

Spring 2010 Light Goose Conservation Order

New Jersey Division of Fish and Wildlife expects approval from the U.S. Fish and Wildlife Service to implement a conservation order in New Jersey to permit an expanded harvest season on light geese during the spring of 2010. (See article, page 76.) A conservation order is a special management action, permitted through the Migratory Bird Treaty Act, which allows for the control of certain wildlife populations when traditional management programs are unsuccessful in preventing overabundance. Major components of the conservation order in New Jersey will include the following:

Conservation Order dates: (Feb. 16–April 10), 2010, except Sundays.

Required Credentials:

- 2010 New Jersey Firearms or All-Around Sportsmen License
- 2009 Federal Migratory Bird Hunting and Conservation Stamp. (NOTE: 2009 stamps are valid until June 2010.)
- 2009 New Jersey Waterfowl Stamp certification. (NOTE: 2009 stamp certifications are valid until June 2010.)
- New Jersey Light Goose Conservation Order Permit. NOTE: A HIP certification is NOT required. Check the 2009-10 Migratory Bird Regulations brochure for instructions on obtaining a Conservation Order Permit.

• **Conservation Order Location:** Statewide

• **Firearms:** Shotguns not larger than 10 gauge and capable of holding no more than seven shells, including magazine and chamber.

• **Ammunition:** Nontoxic shot not to exceed Size T (0.200 inch) only. Nontoxic shot includes steel, bismuth, tungsten-iron, tungsten-polymer, tungsten-matrix, tungsten-nickel-iron (HEVI-SHOT), tungsten-iron-nickel-tin (TINT), tungsten-bronze and tungsten-tin-bismuth. Possession of lead shot is prohibited.

• **Electronic calls allowed:** Yes

• **Hunting Hours:** ½ hour before sunrise to ½ hour after sunset.

• **Daily bag and possession limit:** None

• **Legal Species:** Greater snow goose, lesser snow goose, and Ross's goose, collectively known as light geese.



Photo by Tom Pagliaroli

What Do I Need To Hunt Migratory Birds In New Jersey?

- **Required to hunt crows:** a New Jersey hunting license.
- **Required to hunt woodcock, rail, snipe, coots or moorhens (gallinule):** a New Jersey hunting license and Harvest Information Program (HIP) certification; see below for HIP information.
- **Required to hunt ducks, geese or brant:** a New Jersey hunting license, HIP certification, Federal Migratory Bird Hunting and Conservation Stamp and New Jersey Waterfowl Stamp. Both Federal and State stamps are required for waterfowl hunters 16 years of age and older (even those still hunting on a youth license). Federal stamps must be signed in ink across the stamp's face. Federal stamps are available at U.S. post offices, online from Ducks Unlimited (ducksunlimited.org) and many major sporting goods stores who are license agents. New Jersey waterfowl stamp purchase certification is available from license agents and New Jersey Division of Fish and Wildlife's Web site.

Note: Beginning July 1, 2009 physical stamps will be discontinued. State waterfowl "stamps" will print either directly on your hunting license or as a separate tag (depending on your concurrent purchases), and will replace the former paper stamps. Waterfowl "stamps" may be purchased for a specific individual only. Hunters can no longer purchase multiple stamps.

Information For Migratory Bird Hunters

Important Reminder in Obtaining HIP Certification

Hunters must purchase a Harvest Information Program (HIP) certification before hunting ducks, geese, brant, woodcock, rails, snipe, coot or moorhens (gallinules) in New Jersey and must always hunt with proof in possession in the license holder. HIP certifications are valid from Sept. 1, 2009 to March 10, 2010.

The U.S. Fish and Wildlife Service will use this confidential information only to conduct migratory bird harvest surveys. Only a small, random group will be surveyed.

Hunters may purchase an HIP certification via three sales outlets:

1. License Agents

HIP certification may be purchased at any license agent for a \$2 fee. Hunters will have their HIP certification printed on their license.

2. Internet Sales Site

Hunters may purchase an HIP certification for a \$2 fee on Fish and Wildlife's Internet sales site (WildlifeLicense.com/NJ/) then self-print the HIP certifications.

3. Telephone Sales Site

Hunters may purchase their HIP certifications using Fish and Wildlife's telephone sales process (888) 277-2015. Hunters will receive a transaction number; record this number for immediate proof of completing an HIP certification. The actual HIP certification will be printed on the license and mailed to the hunter. Note: purchases made via telephone will incur an additional shipping and handling fee of \$5.13.

Attention Waterfowl Hunters: Special Regulations Permitted During September Canada Goose Season

At the recommendation of the Atlantic Flyway Council, the US Fish and Wildlife Service approved the use of special regulations to help curb the growth of resident population Canada geese. These special regulations are optional. (Also, see chart on page 72.)

1. Electronic calls are permitted.
2. Unplugged guns are permitted. Magazine and chamber may hold up to seven shells.
3. Hunting hours: ½ hour before sunrise to ½ hour after sunset. This allows hunting one half hour later than past years.

Remember: these special regulations apply only to the September Canada goose season. Hunters who choose to use an unplugged gun during the September Canada goose season must remember to reinstall the magazine plug before pursuing other game species.

During all other waterfowl seasons, including duck, brant, regular and winter Canada goose, and snow goose, standard regulations apply. Standard regulations include: electronic calls prohibited, shotguns may not be capable of holding more than three shot shells and hunting hours end at sunset.



New Jersey Waterfowling Clinic

Every year, experienced waterfowling enthusiasts throughout New Jersey join together dedicating their time and energy to present the **New Jersey Waterfowling Clinic**—an all day,

free seminar covering "everything you ever wanted to know" about the traditions of waterfowl hunting in New Jersey. This year is no exception!

Thirty years ago, the clinic began as an opportunity to introduce young people to the world of waterfowl hunting. However, with the growing interest among men and women, as well as children, the event has been transformed into an opportunity for anyone 10 and up to spend a fun and interesting day learning about waterfowling!

Our full-day clinic covers waterfowling from A to Z, and includes bird identification, decoys, calling, guns and ammo, boats, safety, laws and ethics, do's and don'ts, clothing and camo, and even a demonstration by working retrievers! The value of the day is priceless. It's a unique chance to ask any question you've ever had about the sport—to be answered by the most experienced waterfowling enthusiasts in New Jersey. Our instructors have a combined 300 years of experience!

- **Free breakfast and lunch to all attending!**
- **Date:** Sunday, Oct. 4, 2009
- **Location:** Tip Seaman Park, Tuckerton, NJ
- **Time:** 8 a.m.–3:30 p.m.

Please **register in advance** so we can plan accordingly. Call George Larson at (732) 859-6752 or write him at widgeon1123@yahoo.com.

We hope you'll join us this year and share our enthusiasm for all that is waterfowling!

Hunters: Report Banded Birds

Hunters who recover banded migratory birds are asked to report the band number to the U.S. Department of the Interior's Bird Banding Laboratory (BBL), Washington, D.C. Banding data plays a critical role in migratory bird harvest management. There are three ways to report bands:

1. **Online:** reportband.gov
2. **Call Toll Free:** (800) 327-BAND
3. **Write:** to the address inscribed on the band.

Online reporting provides instant access to the original banding information including the species, sex, location, date and age of the bird at banding. Band reporters will be able to print a certificate of appreciation on their home computer or have a certificate mailed to them which will include information about the bird which had been banded.

When contacting the BBL, be prepared to provide: band number, date the bird was recovered, exact location of the bird's recovery as well as nearest town, and method of recovery, e.g., shot or found dead. Hunters may keep the bands. 🦌



Although production of all waterfowl stamps and prints is discontinued in 2009, the 2008 print is still available.

25th Anniversary Edition 2008 New Jersey Duck Stamp Print Hen and Drake Canvasback

The New Jersey Division of Fish and Wildlife's Waterfowl Stamp Advisory Committee still has available the 25th Anniversary Edition Waterfowl Stamp painted by wildlife artist Rob Leslie. The stamp features a hen and drake canvasback.

Artist Rob Leslie currently resides in Turnersville, New Jersey. Originally a Wisconsin native, he graduated from Oconomowoc High School in 1965. As a young man, Leslie left the Badger State for a life on the road as a traveling musician, playing organ and guitar for a rock and roll band known as the Messengers. After settling down in the medical equipment field, he decided to visit the Easton Waterfowl Festival on a whim that proved to be truly inspirational. The experience encouraged him to seriously pursue his own hobby as a wildlife artist.

Less than a year after entering the field of wildlife art, Leslie won the Delaware Duck Stamp Contest and similar contests in Pennsylvania and Idaho. In addition to designing the 2008 25th Anniversary Edition New Jersey Waterfowl Stamp, his art was selected for the Garden State's 1986, 1992 and 1997 stamps. Leslie's art is also featured on several other states' duck stamps and he was chosen as Ducks Unlimited International Artist of the Year in 1996.

Currently, Rob displays his art at the Easton Waterfowl Festival, Old Time Barnegat Bay Decoy and Gunning Show, Wings and Water Festival, Havre de Grace Decoy and Wildlife Art Festival, and Toms River Art and Decoy Festival. His original paintings can be viewed at Ron Kobli's Decoys and Wildlife Gallery in Frenchtown, New Jersey.

The New Jersey Department of Environmental Protection's Division of Fish and Wildlife administers the New Jersey Waterfowl Stamp Program for the purpose of purchasing wetlands for waterfowl habitat. Proceeds from the sale of New Jersey's duck stamps and prints total over \$4,250,000 to date, all to acquire wetlands for waterfowl habitat and public use. The New Jersey Waterfowl Stamp Advisory Committee has committed to the purchase of over 13,000 acres of waterfowl habitat. The committee continues to be involved with the enhancement of thousands of additional acres for the benefit of wildlife.

Limited edition, signed and numbered prints of the 25th New Jersey waterfowl stamp may be purchased directly from New Jersey Division of Fish and Wildlife. To purchase a print, order forms are available on our Web site (NJFishandWildlife.com) or by sending a self-addressed, stamped #10 envelope to:

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Oxford, New Jersey 07863

Orders will NOT be accepted after Dec. 31, 2009

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What is a Light Goose Conservation Order?

Ted Nichols, Principal Wildlife Biologist

Beginning in spring 2009, many Atlantic Flyway states including New Jersey, implemented a conservation order for light geese. So what is a conservation order, why is it necessary and how does it differ from a hunting season? And what, exactly, are light geese?

A conservation order is a special management action, authorized by the Migratory Bird Treaty Act, designed to control a wildlife population when traditional management programs are unsuccessful in preventing overabundance. A conservation order is authorized through the U.S. Fish and Wildlife Service.

This conservation order is exclusively for light geese, the collective name applied to greater snow geese, lesser snow geese and Ross's geese due to their white plumage. In the Atlantic Flyway, greater snow geese are—



by far—the most abundant light goose population, although some lesser snow geese and Ross's geese also can be found.

Greater snow geese breed in the eastern Canadian high arctic and winter predominantly in the eastern United States. Key fall and spring migration staging grounds are centered on the Saint Lawrence River Valley in southern Quebec. Recently, the greater snow goose population has grown to record highs and currently number just over one million birds. This level is twice the population objective of 500,000 birds.

Given the overabundant population status of these birds, the conservation order is likely to continue for several more years.

During the 1990's, biologists working in the Canadian arctic began documenting habitat damage due to excessive grazing from overabundant light geese. Within a few years, both the severity of the damage and the affected areas increased in parts of the Canadian Arctic. Habitat damage from light geese also was observed on staging

areas in southern Quebec and wintering areas in the United States. Simultaneously, serious agricultural damage was occurring on migration and wintering areas as well.

In response to this problem, the U.S. Fish and Wildlife Service (Service) implemented special harvest regulations for light geese in the Mississippi and Central Flyways in 1999 and initiated an environmental impact statement to frame the issue and outline potential solutions. Shortly thereafter, the Service was sued by humane organizations and ultimately withdrew the special regulations. Later in 1999, Congress passed the Arctic Tundra Habitat Emergency Conservation Act which reinstated the special regulations for light geese through an emergency congressional order.

In 2007, the U.S. Fish and Wildlife Service completed the light goose environmental impact statement which examined five alternatives for managing light goose populations ranging from no action, to direct population control by wildlife agencies. All of the proposed alternatives for action in the environmental impact statement were drastic and unpalatable to some degree. However, the consequences of no action—where there would be a serious negative affect to light geese themselves as well as the myriad of bird species dependent on the same habitats—was not acceptable. The recommended alternative in the environmental impact statement was to authorize special regulations, including the use of a conservation order, to increase harvest for overabundant light goose populations.

In November 2008, the Service published the final

rule to implement the preferred alternative among those identified in the environmental impact statement. Together, the environmental impact statement and final rule supersede the Arctic Tundra Habitat Emergency Conservation Act, making the special regulations permanent in the Central and Mississippi Flyways. The rule also makes Atlantic Flyway states, including New Jersey, eligible to implement a light goose conservation order.

The intent of the conservation order is to reduce—and ultimately stabilize—these North American light goose populations, all of which are above population objectives. The conservation order allows hunting an extended time period outside of traditional seasons as well as adding methods for taking these birds, without bag limits. Additional methods of take include the use of electronic calls, unplugged shotguns and extended hours up to one-half hour after sunset.

Standard hunting seasons for migratory game birds are designed to provide recreational opportunities for North American citizens. Under the auspices of the Migratory Bird Treaty Act, annual hunting regulations are intended to keep harvest at levels compatible with a population's ability to maintain itself at a desired population objective. Since there are upper limits to a bird population's ability to withstand harvest, certain regulations—such as bag limits, constraining the number of shot shells in a firearm and banning the use of electronic calls—have been established to limit harvest. These tools (regulations) designed to restrict the harvest, become the same tools utilized to increase harvest under a conservation order where the objective is to reduce an overabundant population.

Thus far, implementation of the conservation order has met with some success for mid-continent North American light geese. Since 1999 under the conservation



Tom Pagliaroli

order, the harvest of mid-continent light geese has more than doubled, and the population growth rate as measured by the midwinter index has been reduced. Based on these experiences from the Mississippi and Central Flyways, biologists estimate that the newly enabled conservation order in the United States portion of the Atlantic Flyway (special regulations have been in place in Quebec since 1999) should increase the continental greater snow goose

harvest rate from the current 20 percent to 26 percent. If this harvest rate is achieved, the light goose population should be reduced to its goal by about 2013. However, several factors will affect this harvest rate including the size of regular season harvest and the magnitude of special spring harvest measures in Quebec.

A conservation order is customarily held in late winter and early spring following the closure of other migratory bird

hunting seasons such as Canada geese. New Jersey's Conservation Order dates are Feb. 16–April 10, 2010. For more details on participating in New Jersey's light goose conservation order harvest, interested hunters should check the Fish and Wildlife Web site or watch for the release of the 2009-10 Migratory Bird Regulations in September. 🦅

Where to Hunt Light Geese

Snow geese may be found statewide but are most abundant in four primary locations.

1. Delaware Bay tidal marshes and nearby inland farm fields contain the most light geese. About 100,000 snow geese are counted in these areas during the Mid-winter Waterfowl Survey in early January. Delaware Bay tidal marshes from Goshen Creek in Cape May County to Mannington Meadow in Salem County contain an abundance of public land. Fish and Wildlife administers much of this public land as wildlife management areas (WMAs). A list of WMAs and their maps can be found at NJFishandWildlife.com/wmaland.htm. Key WMAs for spring snow geese include (from south to north): Dennis Creek Heislerville, Egg Island, Fortescue, Nantuxent, New Sweden, Dix and Mad Horse Creek. Excursions for snow geese in these marshes are much more likely to be safe and successful with a dependable powerboat. Snow goose flocks in this region feed, roost and loaf in the tidal marshes yet often make inland field feeding flights, primarily into Salem and Cumberland counties. However, sometimes these snow goose flocks range as far inland as Mullica Hill, Turnersville and Franklinville. Since snow geese are renowned for flying great distances between roosting and feeding sites, they are more inconsistent in a given area of agricultural fields when compared with tidal marshes on a day-to-day basis.
2. Considerable numbers of snow geese can be found in central New Jersey. Flocks in this region range far and wide and are usually found in an area from Cranbury to Roosevelt to Wrightstown to Burlington. Generally, these birds are found field feeding on private farms necessitating obtaining landowner permission for access.
3. Snow geese are also found in the northern part of the state centered on Merrill Creek Reservoir (closed to hunting) near Phillipsburg. These flocks also range far and wide on a daily basis and are usually found from Belvidere to Washington plus Clinton and Flemington. Most of these flocks are found on private farms.
4. Snow geese can be found in and around Forsythe National Wildlife Refuge in Oceanville. However, this flock tends to be much smaller in spring than in the fall.

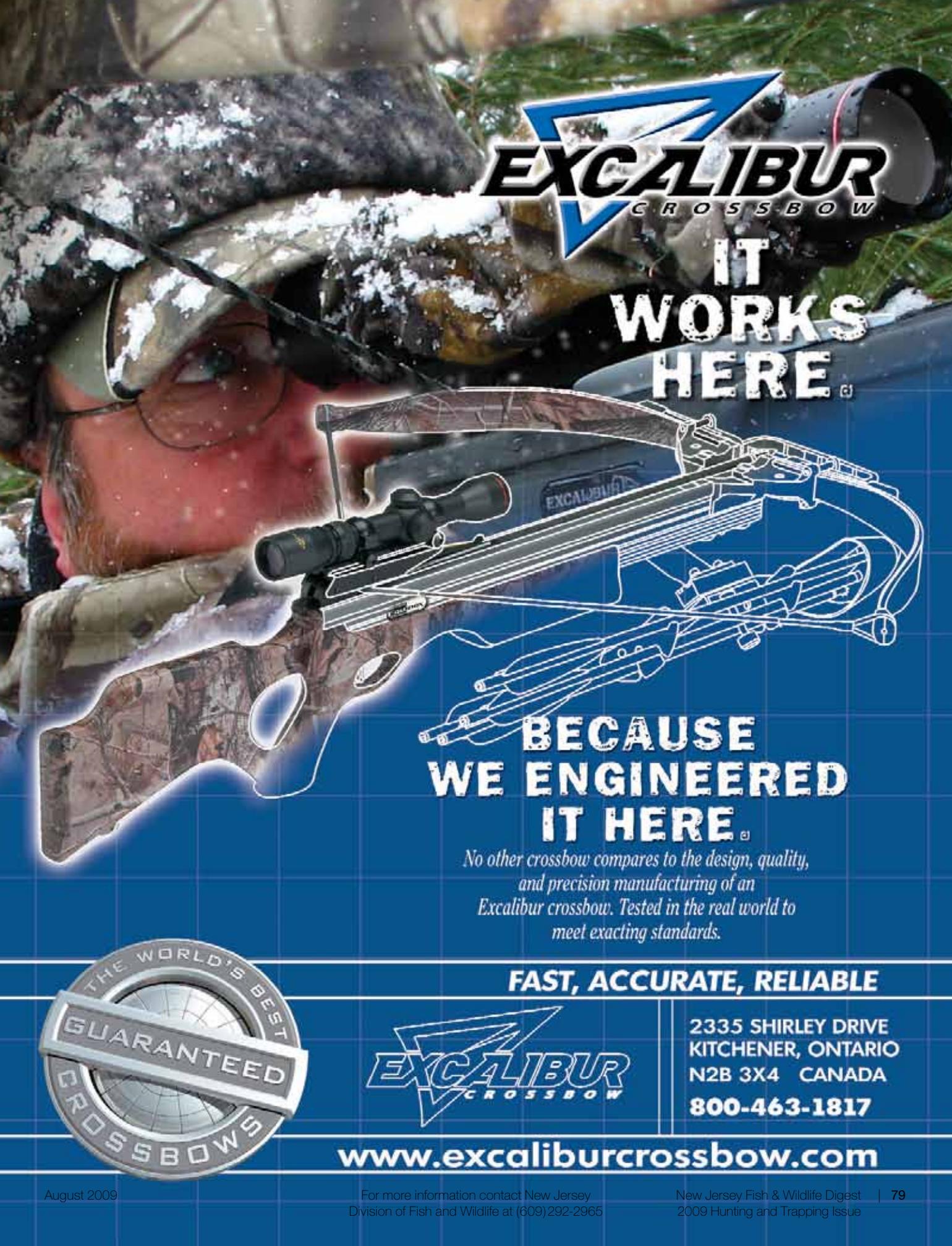


This image (above), from arctic regions of Hudson Bay coastal tundra, show an enclosure used to document the intensity of snow goose grazing damage. The fenced area excludes snow geese thereby preventing foraging whereas the area outside the fence hosted large numbers of snow geese.



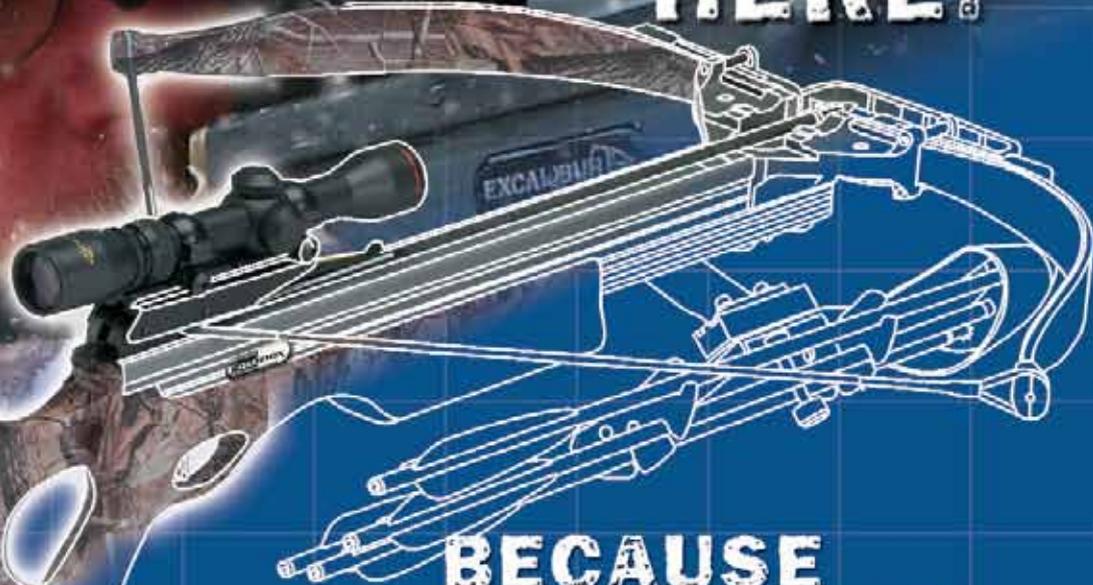
In 1984 (middle), this Hudson Bay study site had snow goose numbers in balance with the habitat which consisted of lush vegetation favored by snow goose broods. By 1997 (bottom), however, as the snow goose colony swelled to numbers beyond the limit that the habitat could support, the quantity and quality of forage declined substantially.

Images courtesy of Hudson Bay Project



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