

ESC America's Top 10

| General Information | Please Use this Column to Provide the Requested Information |
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| Organization & web address | Conservation Council for Hawai'i www.conservehi.org |
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| Report Questions | |
| Do you have photos that can be used in the report? | Yes, taken by Forest and Kim Starr (photos must include photo credit to Forest and Kim Starr) |
| Will you want printed reports? | one only and electronic link |
| If your species is selected, will you use the opportunity to organize around the species and/or publicize its plight? | Of course! |
| The Species & Its Status Questions | |
| Common name, genus & species | Nēnē (umlauts should be macrons or lines over the vowels here)/Hawaiian goose, <i>Branta sandvicensis</i> |
| Conservation Status | Endangered federal and state levels |
| Current population size | estimated 1,300 individuals |
| Has the species been delisted? If yes, when? Was the recovery on time? (Skip questions 17+18.) | No |
| If no, does the species have a recovery plan? | Yes, in draft form dated 2004 |
| If it does have a recovery plan, what is the projected downlisting and/or delisting date? | No date is available. According to the Draft Revised Recovery Plan for the Nēnē, consideration of delisting can occur once all of the downlisting criteria outlined in the nēnē recovery plan have been met, and population levels on Hawai'i, Maui Nui (Maui, Moloka'i, Lāna'i, Kaho'olawe), and Kaua'i have all shown a stable or increase trend from downlisting levels for a minimum of 15 additional years (i.e., for a total of 30 years). |
| Background Questions (for the report profile) | |
| Geographic range | Current: Kaua'i, Maui, Moloka'i, and Hawai'i islands. Nēnē or closely related species probably occurred on all of the main Hawaiian Islands in the past. |
| Habitat | Highly terrestrial; sea level to almost 2,500 meters; non-native grasslands, sparsely vegetated, high elevation lava flows, cinder deserts, native alpine grasslands and shrublands, open native and non-native alpine shrubland-woodland community interfaces, mid-elevation native and non-native shrubland, early successional cinderfall |
| Primary diet (if applicable) | Leaves and seeds of grasses and sedges, leaves and flowers of various herbaceous composites, and various fruits of several species of shrub. Native species with high occurrence in the nēnē diet include 'ōhelo and pūkiawe berries |
| Public Engagement Questions (Please explain why the species is interesting, why it matters, why decision-makers + the public should care.) | |
| Interesting facts about the species | Prior to human settlement, nēnē were probably common in the lowlands on most of the main Hawaiian islands. Human land uses, introduced browsing and grazing mammals, predators, and other factors likely pushed nēnē to the upper elevations, including Hawai'i Volcanoes National Park and Haleakalā National Park. On Moloka'i and Kaua'i, nēnē are relatively common at lower elevations. |
| Additional background information to complete the species profile in the report. | The nēnē is mentioned in the Kumulipo - Hawaiian creation chant - as a guardian. They are part of our island culture and natural heritage. In traditional times, nēnē were eaten, and it is part of the DNA of the Hawaiian people. Native Hawaiians traditionally used nēnē feathers in fashioning their kāhili - feather standards and symbols of royalty. |

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| <p>What are the most important messages that should be communicated about this success story?</p> | <p>Although the number of nēnē have increased significantly since the mid-1900s, it is still in danger of going extinct. Recovery actions, such as predator control and the removal of other invasive species in Hawai'i is an ongoing need. In addition, now that there are more nēnē in some areas, such as on Kaua'i, efforts are being taken to relocate birds to safe habitats. Some citizens are even complaining about there being too many nēnē on Kaua'i. (Having too many nēnē and finding safe habitats for them are good "problems.") We need to communicate messages of co-existence, and at the same time, we need to make sure the public understands that we must keep the nēnē wild and not feed them. Feeding nēnē habituates them to humans and puts them near roads and other heavily used areas in harms way.</p> |
| <p>Outline and describe the existing threats that might impede its recovery, e.g., new threats to its habitat, etc. Include any potential political threats, e.g., a Congressional delisting before its time. Cite any substantiating scientific studies.</p> | <p>Predation by feral cats, feral dogs, feral pigs, rodents, and mongooses is the believed to be the greatest factor in limiting nēnē populations at this time. Additional threats include nutritional deficiency due to habitat degradation; lack of lowland habitat; human-caused disturbance and mortality; behavioral problems; and inbreeding depression.</p> |
| <p>Criteria-Specific Questions</p> | |
| <p>Detail the ecological and scientific importance of the species. Note if it is a keystone species. Describe its role in the biodiversity of its environment. Cite any substantiating scientific studies.</p> | <p>The nēnē is the only extant native goose in Hawai'i. It is unique to the islands and is found naturally nowhere else in the world. At least five additional species of goose occurred in Hawai'i in the distant past, including flightless geese, and their existence is known from archaeological remains in lava tubes, sinkholes, caves, and dunes - repositories of bones of extinct, extant, and flightless birds.</p> |
| <p>Provide information on any additional benefits the species provides, such as economic, medicinal, or ecosystem services.</p> | <p>The nēnē was designated as Hawai'i's official state bird in 1957 and is one of the most recognized and loved Hawaiian endangered species. It has been featured in art and books, on postage stamps, aloha shirts, and pot holders, and as stuffed animals and plushy toys. (Also see #25 above.)</p> |
| <p>Judge's score for importance of species.</p> | |
| <p>What recovery actions have been taken for the species?</p> | <p>Captive breeding; reintroduction to the wild; habitat management, including predator control and removal of additional invasive species; research on diet and essential behaviors; and public education and outreach</p> |
| <p>Why were those recovery actions successful?</p> | <p>Yes, to a point. Although nēnē have increased significantly since the mid-1900s, it is still in danger of going extinct, and it will probably always need human assistance to survive. Predators continue to take a toll, introduced browsing and grazing mammals continue to destroy native ecosystems and nēnē habitat, nēnē are hit by cars in the national parks and other heavily used areas, nēnē are being relocated from Līhu'e Airport to avoid bird-aircraft strikes, and some people on Kaua'i complain there are "too many" nēnē</p> |
| <p>If there are or have been multi-agency and/or public/private collaboration to protect the species, please describe.</p> | <p>State and federal agencies work with private organizations, land owners, and others on recovering the nēnē. Wildlife agencies are also working with transportation agencies to relocate nēnē away from Līhu'e Airport on Kaua'i to prevent birds-aircraft strikes. Private landowners are working with wildlife agencies to increase the population on Moloka 'i through a Safe Harbors Agreement and Habitat Conservation Plan. Wildlife agencies, educators, students, non-profit organizations, and community leaders conduct community outreach, research projects, art projects, and other activities to promote the nēnē recovery.</p> |

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| <p>Please detail the species' recovery. What increases have there been in the size of the population and in the number of populations?</p> | <p>Perhaps thousands of nēnē occurred in Hawai'i when Polynesians settled the islands some 1,500 years ago. Nēnē probably declined as they were hunted for food and habitat was lost as a result of Polynesian settlement and the introduction of rats, dogs, and pigs. Nēnē may have been pushed to the uplands beginning in this period. One estimate of 25,000 nēnē in the early historic period is believed too high. With continued land uses in the lowlands and the introduction of hoofed mammals, mongooses, and invasive plants, nēnē probably continued to decline. Nēnē were hunted - apparently during breeding season - until it was prohibited in the 1920s. But by 1944, nēnē were down to 50, possibly 30 or so individuals, and on the brink of extinction. The nēnē was first listed as endangered in 1967 prior to the enactment of the ESA, a recovery plan has been drafted (July 2004), and no critical habitat has been designated. Captive breeding of nēnē began in 1927 on O'ahu, but ended by 1935. In 1949, the nēnē restoration effort began at Pōhakuloa on the Big Island and continues today on Hawai'i and Maui as a partnership between the U.S. Fish and Wildlife Service, and private partners such as the Zoological Society of San Diego. As of ca. 2004, the wild population on Maui is approximately 349 nēnē and in the wild on Maui and 251 on Hawai'i. Nēnē have also been released on Kaua'i starting in 1985, and the current wild population is approximately 620 birds. The National Park Service also captively bred nēnē at Haleakalā National Park and Hawai'i Volcanoes National Park. In 1823, nēnē were sent to Europe and raised in private zoos and collections for nearly 75 years. Primarily as a result of captive breeding and release into the wild, legal protection, and habitat management, the nēnē population has increased from a low, near-extinction level of 30-50 individuals in the 1940s to approximately 1,300 birds today.</p> |
| <p>If there is political support for the conservation of the species, please explain.</p> | <p>Nearly everyone in Hawai'i cares for the nēnē and respects the fact that this bird needs our help to survive. Even Hawai'i elected officials are aware of the nēnē's endangered status and it's popularity. Nēnē and other native wildlife are popular with visitors and residents, and wildlife viewing/eco-tourism are an important sector of the visitor industry. However, much more political support is needed for wildlife conservation and saving the nēnē.</p> |
| <p>Are there actions that need to be taken by government officials and/or NGOs to continue the recovery?</p> | <p>Increased funding and political support for habitat protection and management, captive breeding, public education, and community outreach. Wildlife agencies should also identify habitat that is essential to nēnē recovery, designate critical habitat, and continue to evaluate the appropriateness of land uses (e.g., game bird or mammal hunting) in nēnē habitat.</p> |
| <p>Are there additional actions that individuals can take to continue the species' recovery?</p> | <p>Learn more about the nēnē and understand that we share our island home with other species. Respect the nēnē and other native wildlife by enjoying nature viewing the birds responsibly. Keep them wild - do not feed the nēnē! Watch for the nēnē crossing signs, and drive slowly to avoid killing or harming nēnē. Encourage others to mālama (care for) our native wildlife by supporting government agencies and non-profit organizations dedicated to protecting native wildlife, by writing to elected officials and letters to the editor in support of the nēnē's recovery, and by volunteering to remove invasives species and assist with other efforts to improve the nēnē's habitat.</p> |
| <p>Judge's score for recovery.</p> | |
| <p>Final Judge's Score</p> | 0 |
| <p>Please submit to Nancy Welch at nwelch@endangered.org by July 3, 2013. Thank you for participating in the 2013 Top Ten Report.</p> | |