

Seattle Waterfowl Management Committee

Fall 2023 Report



*Submitted by:
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Overview

The Seattle Waterfowl Management Committee (SWMC) was formed in 1994 and consists of 9 entities in cooperation with the United States Department of Agriculture, Animal and Plant Health Inspection Services, Wildlife Services (WS). Formulation of the committee was intended to create a partnership between local municipalities that were impacted by the abundance of geese within the Lake Washington region, with a goal of monitoring local abundances and working with WS to mitigate the impacts of a growing population. Impacts consist of defecation in city parks, elevated coliform bacteria levels at local swim beaches, aggressive behavior by geese towards humans when protecting nests, and frequent calls and complaints by city residents regarding goose activity on their property. Additional risks to human health and safety generally result from feeding by humans, such as food aggression and habituation.

Monitoring Surveys

Boat Surveys

WS conducts five boat surveys on Lake Washington between March and August. Surveys consist of driving the outer perimeter of Lake Washington and along the perimeter of Mercer Island, scanning the shoreline, rooftops, docks, lawns, bridges, parks, and coves in search of geese and recording the number of adults, goslings (if present), and their location. Starting in 2023, Lake Union is now incorporated into this survey.



*Figure 1 - Geese on dock at Lake Washington waterfront home.
Note: Geese habituated to coyote effigy.*



Figure 2 - Geese at Gas Works Park.

Vehicle Surveys

Surveys are conducted once per month from a vehicle. Angle Lake, several city parks, and a retention pond near SeaTac airport were added in 2023, bringing the current total to 31 sites within the King County and Lake Washington areas that are surveyed. The same information as the boat surveys is recorded during the driving surveys.

Control Methods

Non-lethal Control

WS employs various tools to haze geese loafing at city parks. These tools consist of dogs, lasers, pyrotechnics, mylar tape, and harassment by firearms and paintball guns. It is important to diversify the techniques used throughout the year as geese become habituated to tools that are used routinely.



Figure 3 - Use of pyrotechnics to scare geese from a city park.



Figure 4 - Geese contained in a pen during a roundup.

Permitted Take

There are several methods employed by WS as approved take by the United States Fish and Wildlife Service (USFWS). Methods consist of egg oiling, egg addling, shooting, and roundups. Some of these tools require a permit from USFWS and assist in directly reducing the number of geese frequenting an area. WS possesses the necessary permits for this work and renews these permits annually.

Observations

Boat Surveys

The number of adult geese and the number of goslings observed per survey from 2019 through 2023 were plotted against each other (Figure 5). When considering data over the past 5 years, the linear trendline for adults observed per survey is on a slight decline, suggesting that current non-lethal and permitted take methods are functioning in a manner to stabilize, and possibly slightly reduce, the population of adult geese around Lake Washington. The linear trendline for juveniles is flat, implying that these same methods, in addition to egg oiling, are proving successful in reducing the number of juvenile birds being recruited into the adult population. It is important to note that juvenile geese are generally born March – May and are recorded as adults when they become fully grown, typically by July.

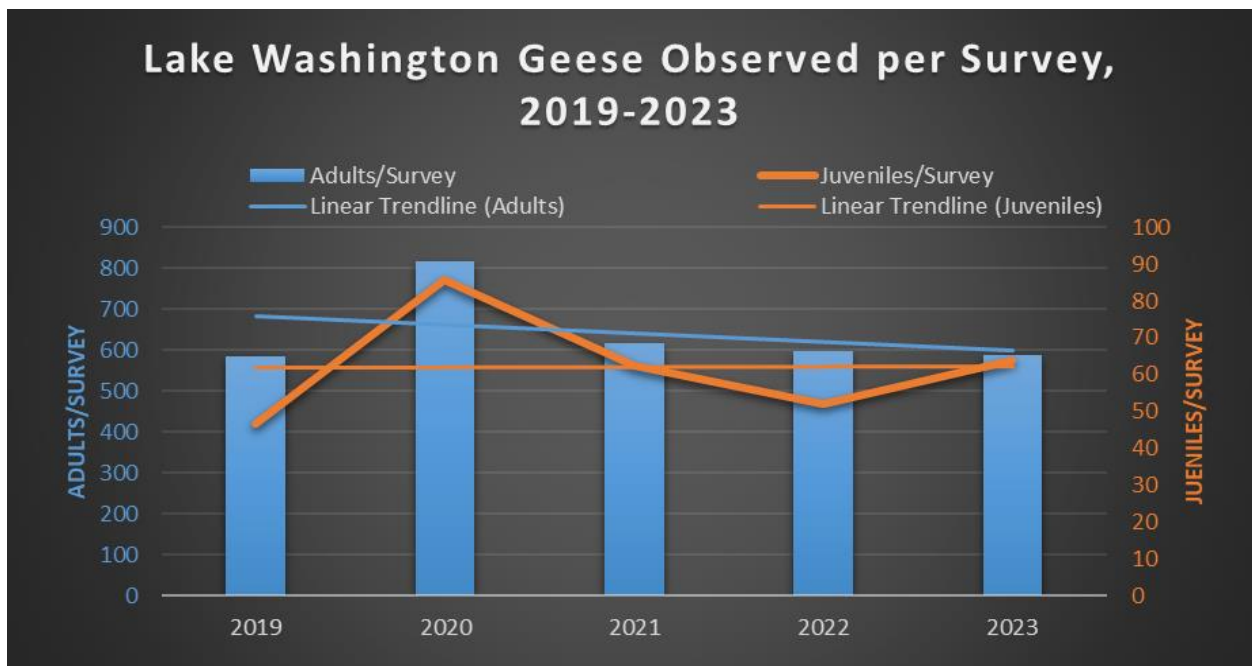


Figure 5 - Lake Washington geese observed per survey with a linear trendline for adults and juvenile geese. NOTE: Lake Union was added to this survey for 2023, likely resulting in a slight increase in the number of geese recorded in 2023.

While geese were distributed throughout Lake Washington, a Kernel density analysis of observations collected during this survey was conducted to identify any locations in which geese congregated in numbers greater than in other areas (Figure 6). Union Bay held the highest numbers of geese. This was followed by the East Channel, and then the north end of Lake Washington in Kenmore and Fairweather Bay in Hunts Point.

Vehicle Surveys
 Vehicle surveys conducted in the Lake Washington area/King County show an overall increase in the number of geese in the surrounding areas

of Lake Washington/King County (Figure 7). While the data from 2020-2021 is absent, the increasing trend remains. This suggests that goose populations are on the rise in areas outside the reaches of roundups, egg oiling, and harassment conducted on/near Lake Washington. This highlights the importance of permitted take and non-lethal actions to maintain a stable population on and in the immediate vicinity of Lake Washington. If this increase continues in future years, the participating members of the Waterfowl Committee should engage in discussions about increasing egg oiling activities and roundups, as well as pursuing other municipalities, State agencies, and large businesses that may be impacted by growing Resident Canada goose numbers to partner with the SWMC.

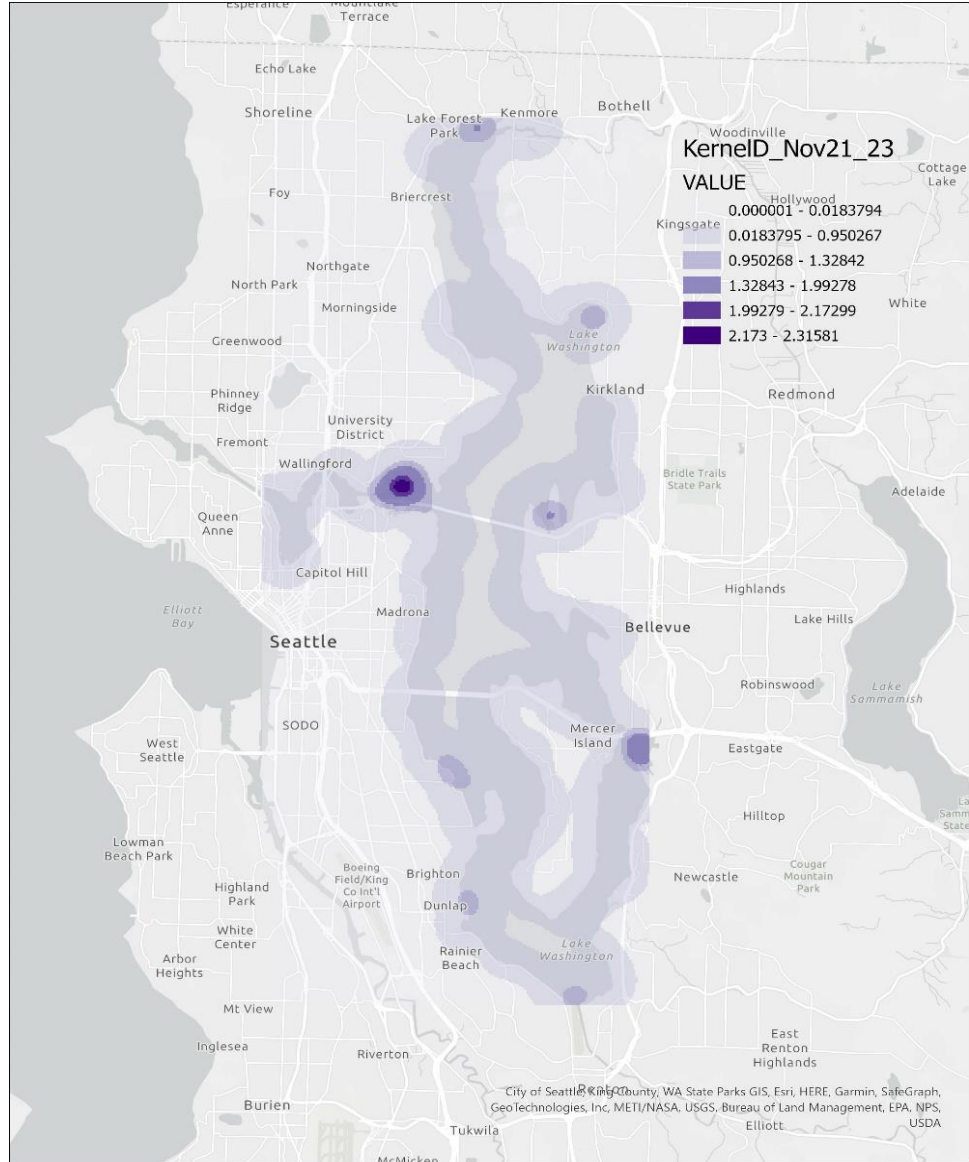


Figure 6 - Kernel density analysis of Lake Washington goose observations. These data are from 2022-2023 and are presented in the number of geese per 200'x200' area.

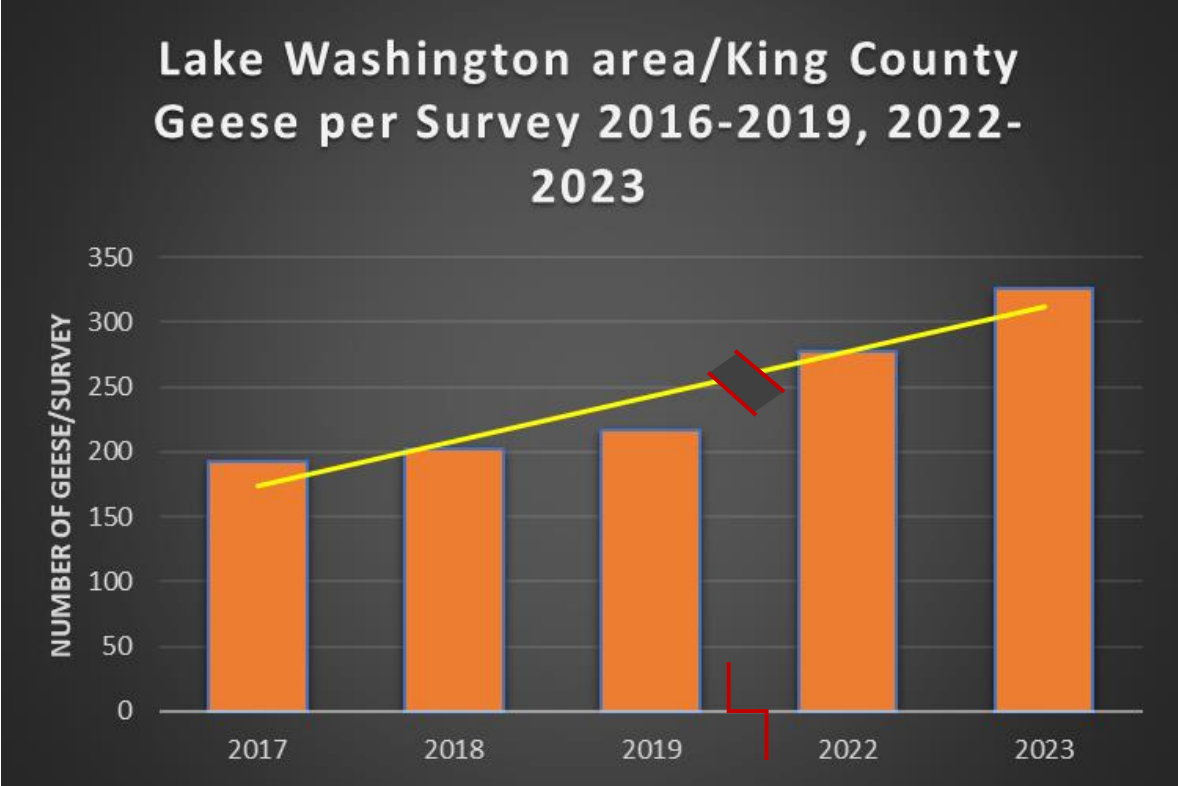


Figure 7 - Lake Washington/King County area vehicle survey observations conducted 2015-2019, 2022-2023. Due to park closures and work restrictions resulting from the Covid-19 pandemic, vehicle surveys were not conducted in 2020 and 2021.

For questions regarding this report, please reach out to Brook Zscheile at 360-337-2778 or at brook.zscheile@usda.gov.