From: N Whitcombe

To: <u>Coffin Butte Landfill Appeals</u>

Subject: LU 24 027 AGRICULTURAL DAMAGE REPLACEMENT EMAIL

Date: Monday, October 20, 2025 3:14:29 PM

Attachments: AGRICULTURAL DAMAGE BY LANDFILL BIRDS.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please delete the email sent at 3:05 pm and replace it with this one. I attached the wrong file.

Thank you

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N J Whitcombe

WHITE PAPER ON LANDFILL NUISANCE BIRD DAMAGE – DECREASED FARM INCOME IN THE WILLAMETTE VALLEY

BCC CUP CRITERIA: 53.215(1) - SERIOUSLY INTERFERES WITH USES ON ADJACENT PROPERTY

LANDFILLS ATTRACT BIRDS. BIRD DEPRADATION RESULTS IN SIGNIFICANT ECONOMIC DAMAGE ESTIMATE: A SIGNIFICANT PERCENTAGE (10%-50%) OF AGRICULTURAL CROP LOSSES

SUMMARY

AGRICULTURAL CROPS ARE A MAJOR SOURCE OF REVENUE AND EMPLOYMENT IN BENTON COUNTY AND THE LARGER WILLAMETTE VALLEY

LANDFILLS ATTRACT SCAVENGER NUISANCE BIRD FLOCKS IN THE THOUSANDS AND TENS OF THOUSANDS. BIRDS ARE A MAJOR SOURCE OF CROP DAMAGE.

CROP DAMAGE BY LANDFILL NUISANCE BIRDS CAN DESTROY FROM 10% TO 50% OF BERRY AND GRAPE CROPS, RESULTING IN SUBSTANTIAL ECONOMIC DAMAGE TO BERRY AND WINE GRAPE GROWERS.

DETAIL

The crop category "Fruits, tree nuts, berries" generates \$24,498,000 in sales in Benton County, which is ranked 11th in the state of Oregon in production of these crops.ⁱ

According to an article authored by Brewer, Linda et al.,

"Bird predation is a common threat wherever fruit is grown. Bird predation is a significant threat to marketable yields. Loss estimates are about 10% to 20% in blueberries...and 5% to 10% in grapes. However, some vineyard sites have reported up to 50% losses."

The article continues,

"In Oregon, the birds responsible for the most crop damage include:

...European starlings (Sturnus vulgaris)...[European starlings are listed third]"

Evidence has been presented (including photographic evidence) in testimony about the large flocks of gulls, crows, and European starlings that flock around the landfill during fall, winter and early spring. European starling flocks can number in the thousands, or even tens of thousands.

European Starlings routinely fly from 15 to 30 miles between roost sites and feeding sites, they can fly that distance in twenty minutes or so (they fly at speeds of 37-50 mph. When they overfly a ripening crop of berries or wine grapes en-route from roosting spot to forage at the landfill, they will not resist the temptation to stop to eat. Unfortunately, birds generally defecate after eating, which can result in unsellable produce.

Benton County Oregon contains 434,560 acres. If the distance a European Starling (Sturnus vulgaris) could travel is 15-30 miles that is an area of 452,289 acres, larger than all of Benton County (a the minimum 15-mile radius with its center at the landfill, the area covers portions of Benton, Polk, Linn, and Marion Counties).

Bird feces not only contaminate fruit, but are also vectors that can cause the potential transmission of diseases, by physically carrying debris and pathogens to other locations via feathers, feet, and beaks, potentially affecting landfill workers, orchardists, farmers, residents and area storm water.^{iv}

Vineyards and blueberry growers within an easy starling flight include Airlie Winery, numerous vineyards in the Independence area, Anderson Blues, and the Davis Family farm among others.

ENDNOTES LINKS TO CITED ARTICLES:

¹United States Department of Agriculture

Census of Agriculture, 2022 State and County Profiles, Oregon

https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/

"Lukas, Davis, Sanchez, and Brewer, Linda

"Nonlethal bird-deterrent strategies", authors: Lukas, Davis, Sanchez, and Brewer, Linda OSU Extension Service, September 2020,

Oregon State University

https://extension.oregonstate.edu/catalog/em-9286-nonlethal-bird-deterrent-strategies

iii Bruun, Mans, and Smith, Henrik

"Landscape composition affects habitat use and foraging flight distances in breeding European starlings"

Biological Conservation, Volume 114, Issue 2

https://www.sciencedirect.com/science/article/abs/pii/S0006320703000211

^{iv} Campbell, Don

"Birds Trash Poison: Plans to disperse nuisance birds spark controversy"

Columbia Insight, Environmental News for the Pacific Northwest, September 16, 2021

https://columbiainsight.org/plans-to-disperse-nuisance-birds-spark-controversy/

WHITCOMBE BRIEF STATEMENT OF QUALIFICATIONS

(CV including publications & awards available on request)

You may notice from Nancy Whitcombe's CV submitted on previous white papers that she is neither an ornithologist nor an agronomist. She has relied in preparing this report in interviews with local farmers (contacted by phone or at the Benton County farmers markets), the Animal and Plant Health Inspection Service (APHIS), local expert Wei Yang at the Oregon State University College of Agricultural Sciences, who, from his bio:

...provides leadership for the blueberry education program in the North Willamette District where most of the state's blueberry industry is concentrated. [He] also conduct[s] applied research in blueberry production systems...

https://agsci.oregonstate.edu/users/wei-yang

Thanks to local expert and soil scientist Linda Brewer, for her invaluable contribution on the damage inflicted on Willamette valley berries and wine grapes by European Starlings (Sturnus vulgaris)