Washington Residents' Contributions to Wildlife Habitat Around the Home

Participation and Expenditures in 2022





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Report acknowledgements

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Cover photo

Anna's hummingbird on a nectar feeder in Snohomish County, WA. Photo by David Macellari, 2021.

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Acknowledging the Indigenous People of the Pacific Northwest

Since time immemorial, Indigenous People have lived in the Pacific Northwest and hunted, fished, and gathered natural resources, traditional foods, and medicinal plants to support their diverse cultures. They were the original occupants and stewards of this land that all Washingtonians enjoy today.

The very survival of the Pacific Northwest Tribes is a testament of resiliency of what they have endured and continue to endure throughout generations on this landscape. Through many historical encounters of massacre, renunciation of religious freedom, systemic racism, cultural assimilation of native children through institutional residential schools, and the fight for their inherent rights and liberties, they have prevailed. Throughout this painful history brought by colonization, abrogated treaties, infringement of civil rights, and the salmon protests of the 1960s, the Northwest Tribes and the Washington Department of Fish and Wildlife (WDFW) have founded a commitment of respect, unity, and alliance informed by the realities of the past.

Today, tribal governments and WDFW work collaboratively to conserve and manage aquatic and terrestrial resources statewide and practice sound science to guide management decisions. The Tribes and WDFW work together to ensure the sustainability of fish, wildlife, ecosystems, and culture for the next seven generations and beyond.

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Introduction

Washington Department of Fish and Wildlife (WDFW) manages over one million acres, primarily for the provision of fish and wildlife habitat, the food, water, shelter, and space wildlife rely upon. Aside from land that is managed by public agencies, fish and wildlife habitat is found on private lands, which represent approximately 57% of the state's land base (Washington State Recreation and Conservation Office 2014). These habitats range from small pollinator gardens and nest boxes to private shorelines and wooded lots to converted farm fields. Contributions to habitat at people's urban, suburban and rural homes are critical for conserving Washington's biodiversity.

In Washington, residents across the state commonly see songbirds, squirrels, raccoons, opossums, deer, and a variety of other species in their yards and near their homes. In the face of increasing urbanization of natural areas, activities like maintaining pollinator gardens, planting native species, installing rain gardens, and feeding birds provide wildlife with habitat connectivity in cities, neighborhoods, and communities throughout the state. Responsible feeding and providing natural habitat for birds and other wildlife represent important opportunities for people to connect to nature in their communities, which may further influence engagement in biodiversity



Dark-eyed junco on a bird feeder in King County. Photo by WDFW, 2022

conservation (Gaddard et al. 2013, Clucas et al. 2015, Dayer et al. 2019, Larson et al. 2022, Samus et al. 2023, Silvert et al. 2023).

In 2022, the U.S. Fish and Wildlife Service (USFWS) and the Association of Fish and Wildlife Agencies (AFWA) sponsored a revised National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (U.S. Department of the Interior 2022). The Survey measured participation in and spending on wildlife-related recreation activities, including feeding birds and maintaining plantings and natural areas for the

benefit of wildlife. Washington was one of 15 states that had enough survey responses to allow us to accurately estimate Washingtonians' participation and spending in wildlife-viewing associated recreation activities. In total 2,830 residents were interviewed about these activities.

This report presents estimates of participation rates of Washingtonians who engaged in activities that provide habitat to wildlife in 2022. It also shares estimates of the amount of money Washingtonians spent on these activities. The report focuses on six specific measures of participation of spending:

- 1) Participation in feeding birds around the home (i.e., within a one-mile radius of a person's residence).
- 2) Expenditures on:
 - a. nest boxes, bird houses, and baths and
 - b. food for birds, including commercially packaged and other bulk foods.
- 3) Participation in maintaining plantings, such as shrubs or agricultural crops, around the home for the benefit of wildlife.
- 4) Expenditures on installing and maintaining plantings around the home for the benefit of wildlife.
- 5) Participation in maintaining natural areas, such as wooded lots, hedgerows, or open fields of at least one-quarter acre for the benefit of wildlife, not including farmland.
- 6) The acreage of natural area maintained for the benefit of wildlife.

The report closes with a discussion of some of WDFW's programs that support the provision of fish and wildlife habitat on private lands. These estimates should be considered an addendum to an earlier report on participation, demographics, and spending estimates for fishing, hunting, and wildlife watching in Washington published earlier in 2024 (Van Deynze 2024). Details on the survey methods can be found in the earlier report. The specific questions used to recover these results are presented in this report's appendix.

Results

Feeding birds and wildlife around the home

Statewide, an estimated 39% of Washington residents fed birds or wildlife around their homes in 2022, or 2.4 million people (Figure 1). Older residents were more likely to have participated than younger residents, with 51% of seniors age 65 and older participating and only 29% of those age 35 and younger participating. The highest (\$200,000 or more) and lowest (\$34,999 or less) income households were the least likely to have fed birds and wildlife. The participation rate was highest among residents of



Chestnut-backed chickadee on bird feeder in King County. WA. Photo by Kristi Binau. 2020.

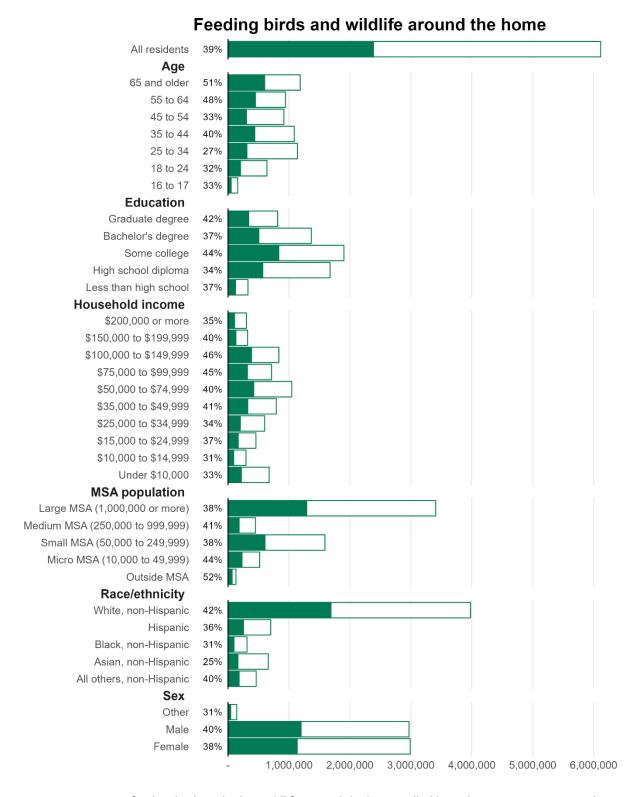


Figure 1. Participation in feeding birds and other wildlife around the home. Filled bars show participants in each category. Open bars show the total number of residents in each category. The participation rate for each category is given to the left of each bar.

counties outside of a Metropolitan Statistical Area (MSA).¹ Forty-two percent of white, non-Hispanic residents fed birds or wildlife during 2022, while only 25% of Asian, non-Hispanic and 31% of Black, non-Hispanic residents did so during the same year.

Washingtonians spent a considerable sum on food and shelter for birds and wildlife around their homes (Figure 2). Residents spent an estimated \$14.5 million on shelter and water (nest boxes, bird houses, and baths) and \$51.3 million on food for birds (including both commercially prepared and other bulk foods). For both product categories, spending was skewed to the right, meaning that while the median spender spends \$60 or less on each product group, there was a smaller number of big spenders.

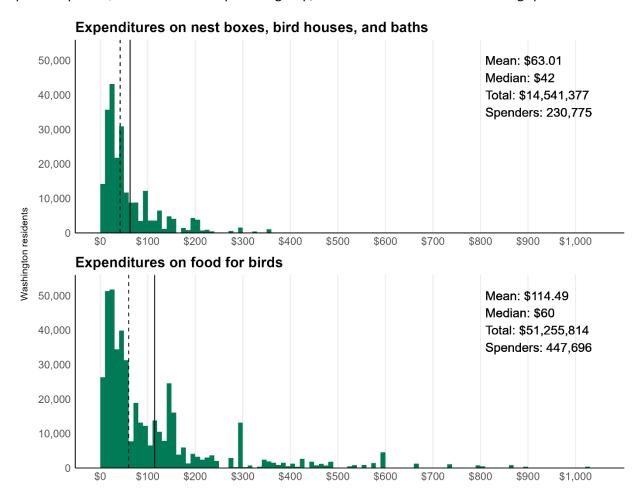


Figure 2. Expenditures on feeding birds and other wildlife around the home. Solid vertical line shows mean expenditures. Dashed vertical line shows median expenditures.

¹ An MSA is a county or group of contiguous counties containing at least one city of 10,000 or more inhabitants or twin cities (i.e., cities with contiguous boundaries and constituting, for general social and economic purposes, a single community) with a combined population of at least 10,000. A list of Washington MSAs is provided in the Appendix.

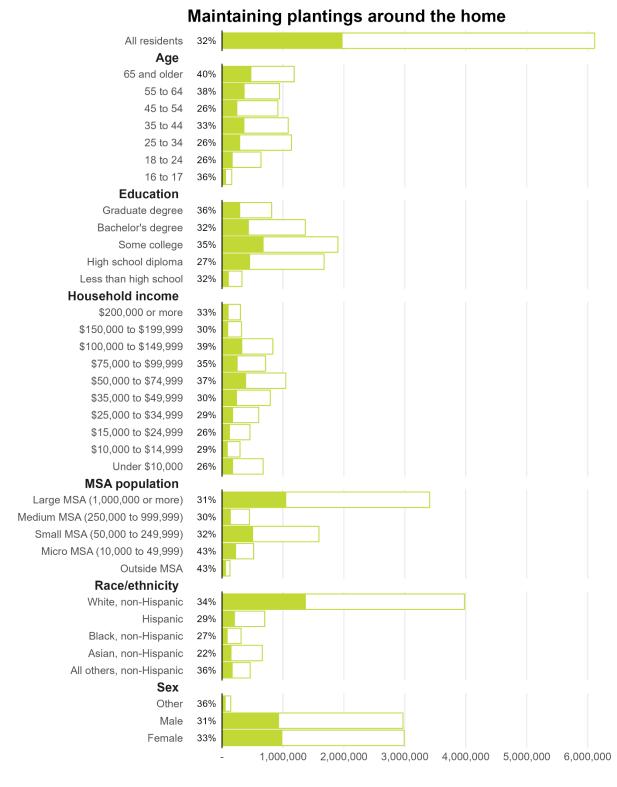


Figure 3. Participation in maintaining plantings around the home. Filled bars show participants in each category. Open bars show the total number of residents in each category. The participation rate for each category is given to the left of the bars.

Maintaining plantings around the home

Nearly one third of Washingtonians, or approximately 2 million people, maintained plantings around their homes for the benefit of wildlife in 2022 (Figure 3). Participation in maintaining plantings for wildlife was higher among residents with household incomes over \$50,000. Residents of micro MSAs (communities with populations between 10,000 and 49,999) or areas outside an MSA (communities with populations below 10,000) were also considerably more likely to participate than residents in more densely populated areas. White, non-Hispanic residents were more likely to participate in gardening for wildlife than Hispanic, Black, non-Hispanic, and Asian, non-Hispanic residents.

Over 600,000 residents spent nearly \$143 million on installing and maintaining plantings in 2022 (Figure 4). Over a third of spenders spent \$50 or less, while the median spending was \$100. Note that these data do not provide insight into the specific plants residents select for their gardens (i.e., native vs. introduced) nor their success in promoting local wildlife populations. These are opportunities for future research.



Planting native plants in King County, WA. Photo by WDFW, 2024.

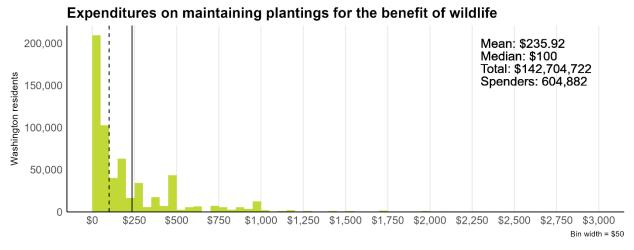


Figure 4. Expenditures on maintaining plantings around the home. Solid vertical line shows mean expenditures. Dashed vertical line shows median expenditures.

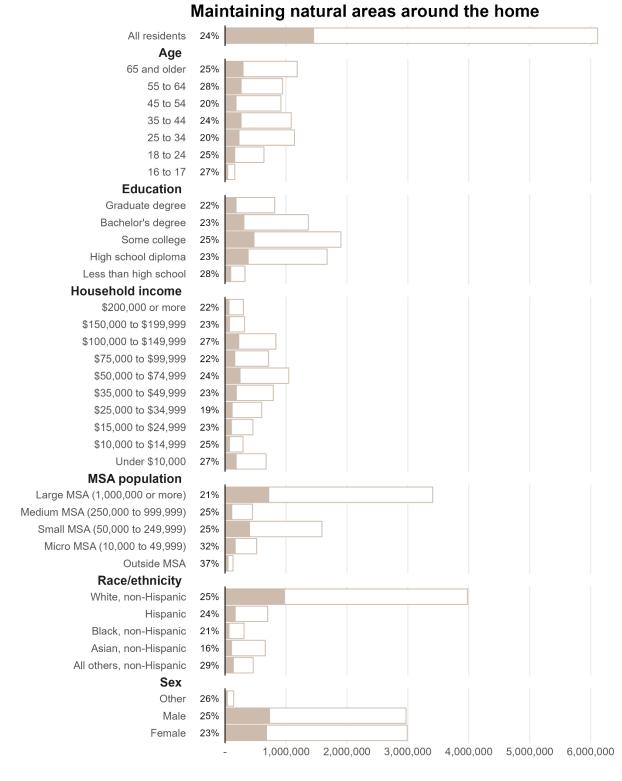


Figure 5. Participation in maintaining natural areas around the home. Filled bars show participants in each category. Open bars show the total number of residents in each category. The participation rate for each category is given to the left of the bars.

Maintaining natural areas around the home

Twenty-four percent of Washington residents, or approximately 1.5 million people, maintained natural areas such as wooded lots, hedgerows, or open fields for the benefit of wildlife within one mile of their homes in 2022 (Figure 5). Participation was consistent across age, education, household income, and gender categories, while residents of smaller MSAs were more likely to have participated than residents of more densely populated areas. Asian, non-Hispanic residents were less likely to have participated than other race and ethnic groups. Collectively, residents maintained an estimated 2.9 million acres for the benefit of wildlife, nearly three times the acreage maintained by WDFW alone (Figure 6). While the vast majority of those who maintained natural areas maintained one acre or less, a considerable number of Washingtonians maintained larger acreage.

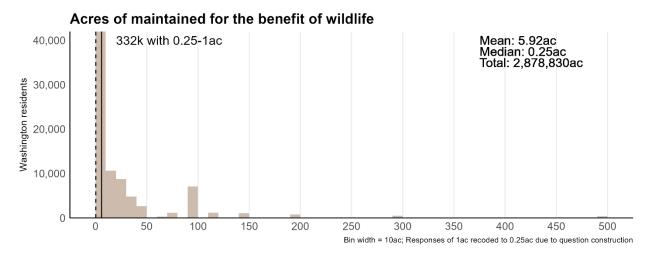


Figure 6. Acres of natural areas maintained around the home. Solid vertical line shows mean expenditures. Dashed vertical line shows median expenditures. The question item asked respondents to enter values of less than one acre as "1", so responses of one acre were recoded to one-quarter acre for a conservative estimate. The bin for 0-10ac is cut off at the top for clarity.

Agency support for habitat on around the home

The <u>Habitat at Home</u> program is WDFW's effort to encourage residents to connect with nature where they live, work, and play. Originally named the Backyard Wildlife Sanctuary pro gram, WDFW launched the program in 1985 to engage urban residents in supporting and learning about urban wildlife. With the recognition that not everyone has a backyard and that "home" is beyond where one sleeps, Backyard Wildlife Sanctuary was rebranded as "Habitat at Home" in 2020. It has developed into a more inclusive program, supporting people in building and stewarding wildlife habitat at apartments and condos,

houses, businesses, schools, and other community spaces. In addition to the physical creation of habitat, Habitat at Home focuses on increasing conservation behaviors and knowledge of regional wildlife habitat needs.

By creating habitat for wildlife at home,
Washingtonians can help offset the acres of
habitat that are lost to housing and urban
development while expanding spaces for wildlife
to move through developed areas. A large focus of
Habitat at Home centers around creating habitat
through planting native plants that naturally
provide food, water, shelter, and space for
wildlife. Native plants are adapted to this region,
require less maintenance, reduce stormwater
runoff, and increase biodiversity.

Habitat at Home is an education-centered program that is free to all Washingtonians. Through the program, WDFW provides wildlife presentations, habitat design workshops, publications, social media content, and web content. Staff connects with the public at events,



Habitat at Home with yard sign in Pierce County, WA. Photo by WDFW, 2023.

including at Conservation District native plant sales, pollinator festivals, Earth Day celebrations, and other community focused events. Habitat at Home also partners with a limited number of schools and community organizations to co-design wildlife habitat, providing education and materials.

In addition to education, Habitat at Home offers habitat certifications to Washington residents. The program has three options for certification: small, yard, and community space. To become certified, applicants must provide some or all habitat elements (dependent on certification type), answer a questionnaire, and submit images of their habitat. They may apply during their habitat-building process and there is no requirement for planting a specific number of native plants. WDFW encourages people

to add native plants while recognizing the cultural, nutritional, and habitat-providing properties of non-native species. With three certification types, free certification, and a low-barrier to enter the program, WDFW aims for Habitat at Home to be accessible to as many people as possible and support constituents in building habitat from the moment they begin.

Small space habitats provide limited wildlife habitat in spaces such as apartment, condo, and townhouse balconies, porches, and garden boxes. They are often less than 100 sq ft, consist of container gardens and raised garden beds, and are ideal for people who rent property or own condominiums.

Yard habitats typically encompass 100 sq ft to 1 acre, though people with habitats larger than one acre may also apply.

Community space habitats are shared spaces where multiple people are stakeholders in the use and care of the space. This includes school yards,



Checking on a wood duck nest box in Douglas County, WA. Photo by WDFW, 2023.

businesses' greenspaces, common areas of apartments, community centers, parks, and community gardens.

Upon certification, enrollees receive a space-specific sign and welcome packet with resources for continued habitat stewardship and outreach. As of the publication of this report, Habitat at Home has certified over 8,000 wildlife habitats throughout Washington state since 1985.

Beyond Habitat at Home, WDFW supports conservation on private lands through several other services. The Landowner Services Division coordinates human-wildlife conflict management and promotes conservation on private lands across the state. The Shore Friendly program coordinates with over a dozen municipalities to provide support for landowners of marine shorelines navigate the permitting and construction process when they are interested in restoring their shorelines for habitat. WDFW also supports landowners as they participate in their counties' Voluntary Stewardship Programs. Local Voluntary Stewardship programs partner with agricultural landowners to implement site-specific practices that protect habitat that Washington's fish and wildlife rely on. Finally, the Priority Habitats and Species program provides scientific information and expert advice to local governemnts and landowners as they implement their land use and development plans.

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Appendix

Question Language

Participation in...

The next questions are about your experiences with wildlife <u>around your home</u>, meaning the area within a one-mile radius of your home. We're interested in whether you took a <u>special interest</u> in observing or viewing wildlife, not just simply noticing wildlife while doing something else such as gardening or exercising. By wildlife we mean birds, mammals, fish, insects, reptiles, and amphibians. <u>Do not include farm animals or pets</u>. Between taking our last survey and December 31, 2022, did you do any of the following wildlife-watching activities <u>around your home</u>, or not?

Fe	eding birds around the home (i.e., within a one-mile radius of a person's residence):
	Did you feed birds or other wildlife?
	□Yes
	□No
Má	aintaining plantings, such as shrubs or agricultural crops, around the home for the benefit of wildlife:
	Did you maintain plantings such as shrubs or agricultural crops for the benefit of wildlife?
	□Yes
	□ No
	aintaining natural areas, such as wooded lots, hedgerows, or open fields of at least one-quarter acre the benefit of wildlife, not including farmland:
	Did you maintain natural areas such as wooded lots, hedgerows, or open fields of at least one-quarter acre for the benefit of wildlife, not including farmland?
	□ Yes
	□No

Expenditures on...

Between taking our last survey and December 31, 2022, did you purchase, or did someone else
purchase for you, any of the following items primarily for your use in observing, photographing, o
feeding wildlife, or not? For any item on the list that was purchased but not primarily for your use
in observing, photographing, or feeding wildlife, please select "No."

For each item that was purchased primarily for your use in observing, photographing, or feeding wildlife, please enter the amount spent. If an item was purchased for you, please estimate its value and enter the amount.

Ne	st boxes, bird houses, and baths:
	Did you purchase nest boxes, bird houses, feeders, or baths?
	☐ Yes → Please enter the total spent: \$
	□ No
Foo	od for birds, including commercially packaged and other bulk foods:
	Did you purchase commercially prepared and packaged wild bird food?
	☐ Yes → Please enter the total spent: \$
	□ No
	Did you purchase other bulk food used to feed wild birds, not specifically packaged as bird food?
	☐ Yes → Please enter the total spent: \$
	□ No
Exp	penditures on installing and maintaining plantings around the home for the benefit of wildlife:
	Last year (from January 1 through December 31, 2022), what was the total cost for maintaining plantings around your home for the benefit of wildlife?
	\$
	\square I did not maintain plantings for the benefit of wildlife

The acreage of natural area maintained for the benefit of wildlife:

Last year (from January 1 through December 31, 2022), how many acres of natural area did you maintain for the benefit of wildlife? Include land and water in acre total. If less than one acre, enter "1."
Acre(s)
\square I did not maintain plantings for the benefit of wildlife

Washington MSAs

Large MSAs (1,000,000 or more): Seattle-Tacoma-Bellevue, WA MSA; Portland-Vancouver-Hillsboro, OR-WA MSA

Medium MSAs (250,000 to 999,999): Olympia-Lacey-Tumwater, WA MSA; Bremerton-Silverdale- Port Orchard, WA MSA; Spokane-Spokane Valley, WA MSA; Kennewick-Richland WA MSA; Yakima, WA MSA

Small MSAs (50,000 to 249,999): Mount Vernon-Anacortes, WA MSA; Oak Harbor, WA MSA; Shelton, WA MSA; Centralia, WA MSA; Longview, WA MSA; Walla Walla, WA MSA; Bellingham, WA MSA; Wenatchee, WA MSA; Moses Lake, WA MSA; Port Angeles, WA MSA; Aberdeen, WA MSA; Lewiston, ID-WA MSA

Micro MSAs (10,000 to 49,999): Othello, WA MSA; Ellensburg, WA MSA; Pullman, WA MSA