Oregon Parks and Recreation Commission

June 12, 2024

Agenda Item: 6a Action

Topic: Natural Areas Registration – Bald Hill Farm

Presented by: Chris Parkins

Background: The Oregon Natural Areas Plan lists the rare species, ecosystems, and geological features present in Oregon and where they are represented by protected lands. OPRD maintains the Oregon register of State Natural Areas and is responsible for processing nominations and petitions received to voluntarily add lands to the register.

"Registration" and "dedication" are two vehicles for inclusion of properties on the register, with dedication being the more permanent arrangement. Privately owned lands that are protected through registration or dedication receive a waiver of land use conversion property taxes. Publicly owned lands are registered because of ecological value without receiving a tax benefit. In all cases of registration, or dedication, the subject properties are required to be of high or unique ecological value.

The types of habitat that are eligible for inclusion on the register are described and cataloged in the State Natural Areas Plan as "ecosystem elements". When enough examples of a particular ecosystem element are registered, that type is considered adequately represented and further registrations are no longer allowed for that element. Find more information about the Natural Areas Program from the Oregon Natural Areas Plan at

https://inr.oregonstate.edu/sites/inr.oregonstate.edu/files/2015 or natural areas plan.pdf

Per legislation, the steps in processing registration nominations are as follows: OPRD Stewardship staff and the Oregon Biodiversity Information Center (or a convened review board, at OPRD discretion) collaboratively review petitions for meeting the requirements of the State Natural Area Plan. If the subject property meets the requirements and intent of the Plan, OPRD Stewardship staff bring the proposal for registration to the Parks Commission for final decision regarding registration.

Greenbelt Land Trust approached OPRD and Oregon Biodiversity Information Center staff in 2024 with a proposal to register their 817-acre Bald Hill Farm property as a State Natural Area. This property is immediately west of the city of Corvallis and is part of a contiguous block of land trust, city and county park properties being managed for natural habitat. The adjacent Bald Hill Natural Area (owned by the city of Corvallis) is also registered as a Natural Area under the State Natural Areas Program.

The Bald Hill Farm property is considered a priority site from a habitat conservation perspective due to its size, connectivity to other protected areas, and the fact that it contains multiple endangered species and associated high value habitat types. These habitats include significant areas of oak woodland, upland prairie, savanna, wetland prairie, and riparian, all of which have been identified as priority ecological systems by OWEB or as "Strategy Habitats" in the Oregon Conservation Strategy.

The attached summary form, map, and photos provide more background on the site and its values. Also included is a landowner letter providing written consent to register.

Prior Action by the Commission: None.

Action Requested: Staff recommend that the Commission approves addition of the Bald Hill Farm property to the register of state natural areas.

Prepared by: Noel Bacheller

OREGON PARKS AND RECREATION DEPARTMENT OREGON REGISTER OF NATURAL HERITAGE RESOURCES SUMMARY FORM

- 1. NATURAL AREA NAME: Bald Hill Farm
- 2. LOCATION: On the west side of the City of Corvallis, in Benton County. T11S R5W Section 31, T11S R6W Section 36, T12S R5W Section 6, T12S R6W section 1, and T12S R6W Section 12.
- 3. SIZE: 817 acres
- 4. OWNERSHIP: Greenbelt Land Trust, Inc., and GLT Properties, LLC.
- 5. CONSENT OF OWNER (PRIVATE), DATE: May 8, 2024
- 6. REGISTER CATEGORY: Registered State Natural Area
- 7. PRINCIPAL NATURAL HERITAGE RESOURCES:

Willamette Valley Ecoregion (from Oregon Natural Areas Plan 2020):

- #9 Oregon white oak-Douglas fir/snowberry woodland
- #11 Oregon white oak/grass savanna
- #12 Oregon white oak/poison oak-snowberry/blue wildrye woodland
- #25 Tufted hairgrass valley bottomland prairie, with vernal pools and brush prairie (including Nootka rose, Douglas spiraea and dwarf blueberry)
- 8. SPECIAL SPECIES: Bradshaw's lomatium (Lomatium bradshawii), clustered goldenweed (Pyrrocoma racemosa var. racemosa), golden paintbrush (Castilleja levisecta), Hitchcock's blue-eyed grass (Sisyrinchium hitchcockii), Kincaid's lupine (Lupinus oreganus), Nelson's checkermallow (Sidalcea nelsoniana), thin-leaved peavine (Lathyrus holochlorus), Willamette Valley daisy (Erigeron decumbens), Oregon vesper sparrow (Pooecetes gramineus affinis), Lewis's woodpecker (Melanerpes lewis), grasshopper sparrow (Ammodramus savannarum), purple martin (Progne subis), Taylor's checkerspot butterfly (Euphydryas editha taylori), Fender's blue butterfly (Plebejus icarioides fenderi)

9. EVALUATION OF CRITERIA FOR REGISTRATION

A. PRIORITY IN PLAN: The Oregon white oak-Douglas fir/snowberry woodland #9 is an unfilled, high priority need. The other ecosystem elements #11, #12, and #25are represented within the larger WV ecosystem though many are not represented in the near

vicinity.

B. ADEQUATE REPRESENTATION: Currently, the size, scope and condition of this property provide representation of Willamette Valley types #9 (25 acres), # 11 (151 acres, # 12 (161 acres) and #25 (22 acres relic and 73 acres restored). All types are in generally good condition having benefited from active management and control of invasive species over the past decade. Some similar ecosystems are represented in the Natural Area Program at "Bald Hill Park," a property that is contiguous to Bald Hill Farm. Placing Bald Hill Farm in the Natural Areas Program would effectively grow the contiguous representation of these high priority Willamette Valley ecosystems and their associated species.

C. DEGREE OF DISTURBANCE: This property contains mixed quality natural habitats. Prior to Euro-American settlement, the site was dominated by oak savanna and upland and wetland prairie, likely maintained through Native American burning practices. The first aerial photo from 1936 shows the property was primarily comprised of open prairie habitat, with oak woodland along the northern ridgeline and trees along riparian areas. These photos also show visible livestock trails and remnant fences, indicating a past history of grazing.

The central and southern parts of the property show evidence of grazing. It is likely that some cultivation of the habitats for pasture grasses and hay took place in the past, but no recent cultivation is evident. The impacts of these actions persist, however, especially in the wet prairies where non-native grasses such as meadow foxtail (*Alopecurus pratensis*) can dominate and native grasses like tufted hairgrass (*Deschampsia cespitosa*) are diminished, without ongoing restoration and enhancement. There are a few small patches of remnant prairie and savanna while the majority of the habitat has been replanted or restored.

Approximately 468 acres of the Property was in agricultural use at the time of GLT acquisition, including most grassland (upland and wetland prairie) areas, shrub habitats, and some of the riparian zones. Today, GLT currently leases 100 acres for grazing to help maintain conditions suitable for breeding of Oregon vesper sparrow. The northwestern part of the property was logged in decades past as evidenced by old skid roads and decomposing stumps of large trees, though exact dates of logging are unknown. A timber survey conducted by Trout Mountain Forestry in 2017 concluded that the last timber harvest occurred in the 1940s when scattered mature firs were cut along the upper ridges. Since that time, the property was largely unmanaged and as a result of ecological succession, transitioned from open oak savanna to a closed canopy forest of fir and oak. More recently, Greenbelt has restored hundreds of acres of oak savanna and oak woodlands by removing encroaching conifers while retaining some mixed oak-fir stands for habitat heterogenity.

Today, the property is dedicated to protecting conservation values, restoring native habitats, and passive recreation. The property is traversed by 3.7 miles of dirt and gravel surfaced trail. This trail is protected by a trail easement granted to Benton County and allows for non-motorized public access to connect to other public trails on adjacent properties to the east and west.

Many of the habitats at Bald Hill Farm have been restored since Greenbelt acquired the first parcel in 2005. Agricultural activities have been retired except for the careful use of livestock grazing to help maintain certain prairie conditions. Hay fields and pastures that were dominated by exotic grasses have been seeded with native prairie species and vernal pools were created to restore hydrology and increase biodiversity. Shrubs and trees have been removed from upland and wetland prairies. Riparian areas degraded by grazing have been replanted with native trees and excluded from the grazing zone. Conifers that invaded oak savannas and woodlands have been removed and understory species seeded and planted. Work is ongoing to maintain and enhance ecological conditions by continuing to remove invasive plants, enhance native diversity with supplemental plantings, and manage habitats for rare species such as Fender's blue butterfly or Taylor's checkerspot. Disturbance processes have also been utilized including limited prescribed fire, careful grazing for habitat enhancement, and mowing outside of the bird nesting seasons.

D. VIABILITY:

The conserved habitats on this property are even more valuable because of their location between other protected sites, such as Fitton Green Natural Area (Benton County Park) and Bald Hill Natural Area (City of Corvallis), and Oak Creek Preserve (Greenbelt Land Trust). All the sites function as biological reserves and as a wildlife corridor for movement of species, thus enhancing the gene flow between sites and across the landscape.

To further support the recovery of Fender's blue butterfly, GLT entered into a formal Memorandum of Agreement with the U.S. Fish & Wildlife Service (USFWS) and Bonneville Power Administration (BPA) to restore and manage a portion of the site as habitat for Fender's blue butterfly. An existing Fender's blue butterfly population is located on the southern end of the Property and habitat for the butterfly is available on other nearby natural areas, making Bald Hill Farm a viable site for future expansion of these populations. GLT management actions include establishing a mix of nectar species, including Kincaid's lupine to support the butterfly population.

This property is identified in multiple regional conservation plans and is considered a target area for oak and prairie species recovery among many partners. Experts from the Institute for Applied Ecology, Center for Natural Lands Management, U.S. Fish and Wildlife Service, multiple researchers from Oregon State University, and the American Bird Conservancy have all provided critical support for ecological monitoring as well as management input for the property. Their contributions include bird surveys, botanical inventories, invertebrate studies, and amphibian and reptile monitoring.

Greenbelt also has financial and technical support for this property from agencies. GLT has enrolled in multiple Environmental Quality Incentive Program (EQIP) contracts with the NRCS to provide cost share funding and technical advice to restore oak and prairie habitat on the site. The site is currently enrolled in CREP to help restore riparian habitat. The Property is also enrolled in the USFWS Partners for Fish and Wildlife Program, which has provided technical assistance, labor, and equipment to assist with ecological restoration.

What's more, there is enormous community support for protecting and restoring this property. Greenbelt has weekly Volunteer Stewards that contribute hundreds of hours annually to helping restore and maintain Bald Hill Farm. Volunteers help remove old fencing, control invasive weeds, monitor conditions, and plant native wildflowers in

restoration zones.

E. UNIQUE GEOLOGICAL VALUES: None listed in the Natural Areas Plan but it does contain a portion of the Corvallis Fault which is of interest to Oregon State University scientists

F. PRIORITY FOR SPECIAL SPECIES:

Bradshaw's lomatium (Lomatium bradshawii), List 1
clustered goldenweed (Pyrrocoma racemosa var. racemose), List 2
golden paintbrush (Castilleja levisecta), List 1-ex
Hitchcock's blue-eyed grass (Sisyrinchium hitchcockii), List 1
Kincaid's lupine (Lupinus oreganus), List 1
Nelson's sidalcea (Sidalcea nelsoniana), List 1
thin-leaved peavine (Lathyrus holochlorus), List 1
Willamette Valley daisy (Erigeron decumbens), List 1
Oregon vesper sparrow (Pooecetes gramineus affinis), List 2
Lewis' woodpecker (Melanerpes lewis), List 2
grasshopper sparrow (Ammodramus savannarum), List 2
purple martin (Progne subis), List 2
Taylor's checkerspot butterfly (Euphydryas editha taylori), List 1
Fender's blue butterfly (Plebejus icarioides fender), List 1

G. SPECIAL SPECIES PROTECTION CAPABILITY: Bald Hill Farm is home to six species listed under the federal Endangered Species Act, including the threatened Nelson's checkermallow and Kincaid's lupine, and the endangered Fender's blue butterfly, Taylor's checkerspot butterfly, golden paintbrush, and Willamette daisy. Several small populations of Nelson's checkermallow are present near the east boundary and in the southern portion of the Property and in 2023 17 acres were seeded with 15.5 lbs. of Nelson's checkermallow seed.

There is an abundance of Kincaid's Lupine, and the associated Fender's blue butterfly, in the high-quality upland prairie in the southern portion of the property. A remnant population of Kindaid's lupine is located in the center-west of the property and Greenbelt has been actively planting Kincaid's lupine to expand the area of habitat suitable for Fender's blue butterfly. Over the last several years 6,000 Kincaid's plugs have been planted and approximately 10 lbs. of Kincaid's seed has been seeded across 65 acres.

The U.S. Fish and Wildlife Service (USFWS) began introducing Taylor's checkerspot, larvae and pupae to Bald Hill Farm in 2021 on an experimental basis. Initial efforts translocated a few individuals from a nearby population and more recent efforts have

released captive-reared individuals. In spring 2024 approximately 560 captive-reared larvae/pupae matured into adult butterflies at Bald Hill Farm. USFWS is working closely with partners to study and monitor the introduction efforts to help ensure success. Occasional Taylor's checkerspot butterfly specimens found at Bald Hill Farm in the past were thought to be males dispersing from an off-site population.

Golden paintbrush was introduced to the southern end of the property in a partnership with Oregon Department of Agriculture and the Institute for Applied Ecology starting in 2010. Approximately 2,000 plugs were planted and a population continues to persist.

The Willamette daisy, a federally endangered species, was once documented near the trail along the eastern boundary of the property, but is no longer found there. However, 2.3 lbs. of Willamette daisy seed was planted across 42 acres during restoration of prairies at Bald Hill Farm in 2023 and 6400 plugs were planted.

Also documented on the property are thin-leaved peavine, Oregon vesper sparrow (candidate species) and Lewis's woodpecker, all federally-listed species of concern. In addition, a small naturally occurring population of clustered goldenweed occurs on the property and grasshopper sparrow and purple martin have been documented during breeding bird surveys. Bradshaw's lomatium is also present after 18.6 lbs. of seed was planted on 17 acres in 2023.

The property also contains suitable habitat for peacock larkspur (*Delphinium pavonaceum*), a special species identified in the Oregon Natural Areas Plan.

The majority of these species are dependent on prairie and oak savanna habitat. While the Bald Hill Farm was historically dominated by these habitat types, and likely supported many of these rare species, they have mostly disappeared due to forest succession, agricultural practices, and competition from invasive species. Greenbelt's primary goal is to restore prairie and oak savanna habitat in order to support the expansion of wildlife species dependent on these rare habitat types. We believe that by protecting and restoring healthy oak savanna and upland and wet prairie habitat, we can support these at-risk species.

H. MANAGEABILITY: Habitats at Bald Hill Farm are managed to increase the diversity of native plant and animal species, with special attention given to the restoration of at-risk Willamette Valley habitats such as upland and wetland prairie, oak savanna, oak woodland, and riparian forest. Prairie habitats and the savanna understory will be managed to increase the diversity of native grasses and flowers with special attention given to protecting and expanding existing populations of rare plant species including Nelson's checkermallow and Kincaid's lupine. Restoration of native prairie vegetation and removal of encroaching trees and shrubs will greatly improve habitat for prairie dependent species such as western meadowlark, chipping sparrow, Oregon vesper sparrow, short-eared owl, Taylor's checkerspot butterfly, and Fender's blue butterfly. Oak woodland and savanna will be managed to limit conifer encroachment, release legacy oaks, and enhance the understory, providing habitat for species such as acorn woodpecker, slender-billed nuthatch, western bluebird and western gray squirrel. Livestock grazing and forest management will be used carefully at Bald Hill Farm as conservation tools and adaptively managed to maintain and enhance the conservation values of the property. Greenbelt has developed management plans for three sub-units of Bald Hill Farm to address limiting factors and guide

management over a 20-year timeframe.

This property will also be managed for public access. The Bald Hill Farm Property is host to approximately four miles of trail, which is protected by a trail easement granted to Benton County. This natural- and gravel-surfaced path is part of a greater network of trails that traverses GLT, Benton County, and City of Corvallis lands. According to the joint recreation plan for this trail network, Benton County is responsible for maintaining the trail, and Greenbelt assists in certain activities. Greenbelt manages public access with signage, annual inspections, invasive species control along trails, educational events, and training volunteer naturalists to walk the trails. By promoting public access to protected areas, Greenbelt builds support for wildlife conservation, active land management, and land acquisition.

10. SPECIAL REMARKS OR COMMENTS:

In addition to the vegetation types listed above in section 7 there are four more vegetation types present is smaller patches: #15 Roemer's fescue valley grassland, #17 Oregon ashbigleaf maple-Oregon white oak riparian forest, #26 Tufted hairgrass-California oatgrass bottomland prairie, and #31 Oregon ash/slough sedge woodland with snowberry. These types add to the significance of the site but are not of primary importance in registering the site in the Natural Areas Program.

Bald Hill Farm is divided into three units for management by Greenbelt Land Trust. The southern 58-acres of upland prairie and wetland is known as Lupine Meadows, named after the abundant populations of Kincaid's Lupine found on the property. Greenbelt Land Trust originally conserved the property through a conservation easement in 2005. In 2007, GLT Properties, LLC (Greenbelt Land Trust, Inc is the sole member), purchased the property in fee title. The Conservation Easement remains in place on the property.

The central 587 acres of prairie, agricultural lands, and oak savanna are together known as Bald Hill Farm. Part of this acreage (483 acres) is permanently protected with a Conservation Easement held by Bonneville Power Administration (BPA), and the remaining 106 acres is permanently protected with a Conservation Easement held by the Oregon Watershed Enhancement Board. The property has been owned and managed by Greenbelt Land Trust since 2013.

The primarily forested area to the northwest is designated as the Mulkey Ridge Forest. The 170 acres of Mulkey Ridge Forest was protected in 2015. Greenbelt Land Trust owns the property in fee title, and BPA holds a permanent conservation easement. All together, these contiguous sub-units make up an 817-acre complex called Bald Hill Farm.

The Bald Hill Farm property is considered a priority site because of its size, strategic location, and multiple high value habitat types identified by the Oregon Conservation Strategy In addition to the Special plant and animal species listed above, Bald Hill Farm is also home to other priority species such as the willow flycatcher, rufous hummingbird, acorn woodpecker, pileated woodpecker, Pacific-slope flycatcher, red-breasted sapsucker, American kestrel, chipping sparrow, American bald eagle, slender-billed nuthatch, western meadowlark, black-throated gray warbler, mountain quail, western gray squirrel, and northern red-legged frog. Bald Hill Farm provides connectivity between other important native habitats in the vicinity. Bald Hill Farm is adjacent to additional permanently protected

areas such as Fitton Green Natural Area (Benton County) and Bald Hill Natural Area (City of Corvallis) for a total of approximately 1,400 contiguous acres of conserved property. This network of protected properties benefits wildlife and recreational users alike.

Bald Hill Farm is identified as a Priority Conservation Landscape in Benton County, Oregon Prairie Conservation Strategy (2010), Benton County Prairie Species Habitat Conservation Plan (2010), and the USFWS Recovery Plan for the Prairie Species of Western Oregon and Southwestern Washington (2010). The property is also located within the USFWS (2010) recovery zones (Corvallis West) for prairie species and listed as a priority area in Identifying Priority Willamette Oaks and Prairie Habitats (TNC, 2011). The Oregon Conservation Strategy (ODFW, 2016) identifies Bald Hill Farm as a component of the Corvallis Area Conservation Opportunity Area (WV-19). Lastly, the site is also highlighted as a Synthesis Conservation Opportunity Area, which was a 2005 mapping effort by The Nature Conservancy.

12. DATE OF ORBIC STAFF APPROVAL: 17 May 2024

13. SOURCES OF ADDITIONAL INFORMATION: Oregon Natural Areas Program, PO Box 751, Mailstop: INR, Portland, OR, 97207; Greenbelt Land Trust, PO Box 1721, Corvallis, OR 97339.

14. IMPORTANCE OF THE SITE IN LAY TERMS:

The Bald Hill Farm property is considered a priority site from a habitat conservation perspective due to its size, connectivity to other protected areas, and the fact that it contains multiple endangered species and associated high value habitat types. These habitats include significant areas of oak woodland, upland prairie, savanna, wetland prairie, and riparian, all of which have been identified as priority ecological systems by OWEB or as "Strategy Habitats" in the Oregon Conservation Strategy.

Not only is Bald Hill Farm home to six federally-listed plant and animal species, it also has enormous potential for establishing additional listed and rare species. Greenbelt Land Trust has a formal agreement with the USFWS and BPA to manage portions of the property to support Fender's blue butterfly, this critically endangered species endemic to the Willamette Valley. This work is part of the Greenbelt vision for creating a "ButterFlyWay," a two-mile corridor that connects critical butterfly habitat across 1,400 acres of conservation lands. Bald Hill Farm's protection and restoration is vital in providing habitat and connectivity to support the future downlisting of this threatened species. Finally, its close proximity to the communities of Corvallis and Philomath makes Bald Hill Farm a popular spot for low-impact recreation and environmental education.

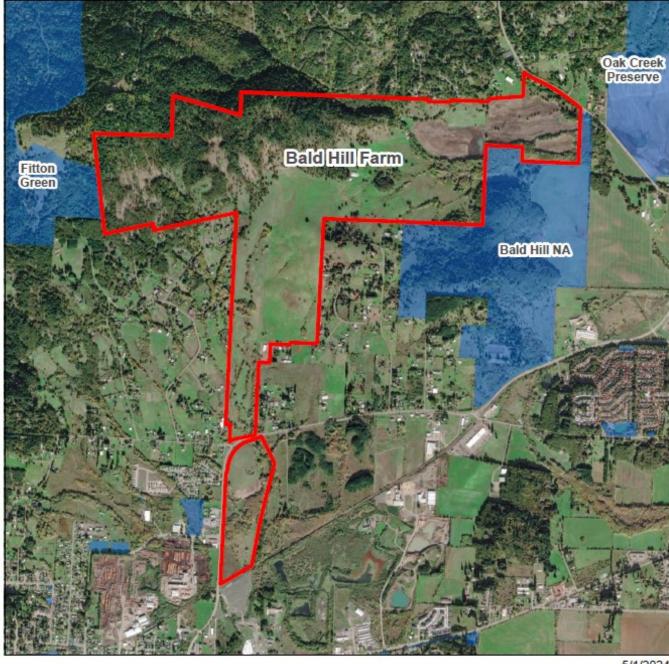
Bald Hill Farm

Conservation Context Map

Greenbelt Land Trust's Bald Hill Farm property sits outside the city of Philomath, Benton County. Not only does 817-ac property have oak woodland, oak savanna, upland and wetland prairie, and riparian areas, it is also home to 6 federally-listed plant and animal species.







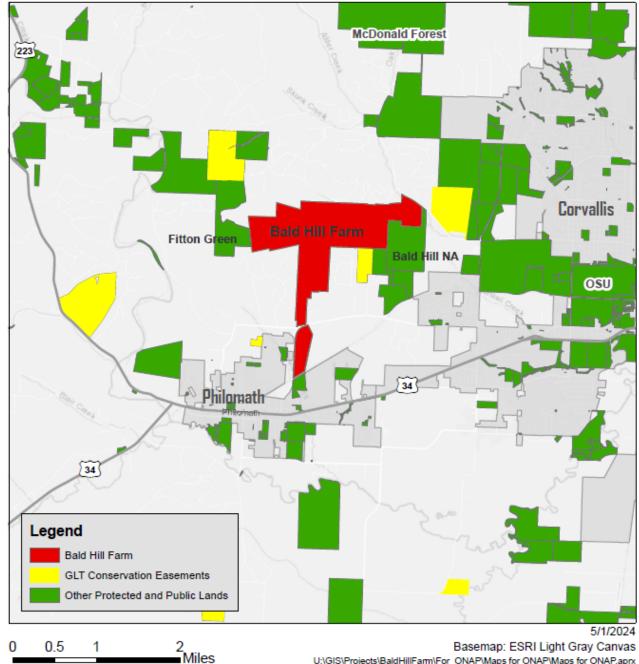
Bald Hill Farm

Conservation Context Map

Greenbelt Land Trust's Bald Hill Farm property sits outside the city of Philomath, Benton County. This 817-ac property is located within a network of public and private conservation lands, including several GLT conservation easement properties. Bald Hill Farm is adjacent to the Bald Hill Natural Area (Corvallis) and the Fitton Green Natural Area (Benton County).









May 9, 2024

Oregon Parks and Recreation Department 725 Summer Street NE, Suite C Salem. OR 97301

Subject: Bald Hill Farm Natural Areas Program Registration

Dear Oregon Parks and Recreation Commission,

Greenbelt Land Trust, Inc. and GLT Properties LLC are the owners of the Bald Hill Farm property, of which Greenbelt Land Trust Inc. is the sole member and owner of GLT Properties LLC. The property is located outside the city of Corvallis in Benton County, Oregon. Greenbelt manages this property for conservation purposes, habitat restoration, and scientific study. We wish to register the Bald Hill Farm property in the Oregon Natural Areas Program.

Sincerely,

Jessica McDonald Executive Director

Jessica McDonald.



Taylor's checkerspot marked for release at Bald Hill Farm in spring 2024. Photo by Lisa Millbank.



Oak savanna with rosy plectritis blooming on 5/18/2023. Photo by Matt Blakeley-Smith.



Oak woodland and savanna after conifer removal. Photo by Jeff Baker.



Camas in prairies at Bald Hill Farm 2023. Photo by Matt Blakeley-Smith.



Kincaid's lupine at Bald Hill Farm 2023. Photo by Matt Blakeley-Smith.