

BOB & CRYSTAL RILEE PARK

Chehalem Park and Recreation District

Environmental Site Analysis



WHPacific



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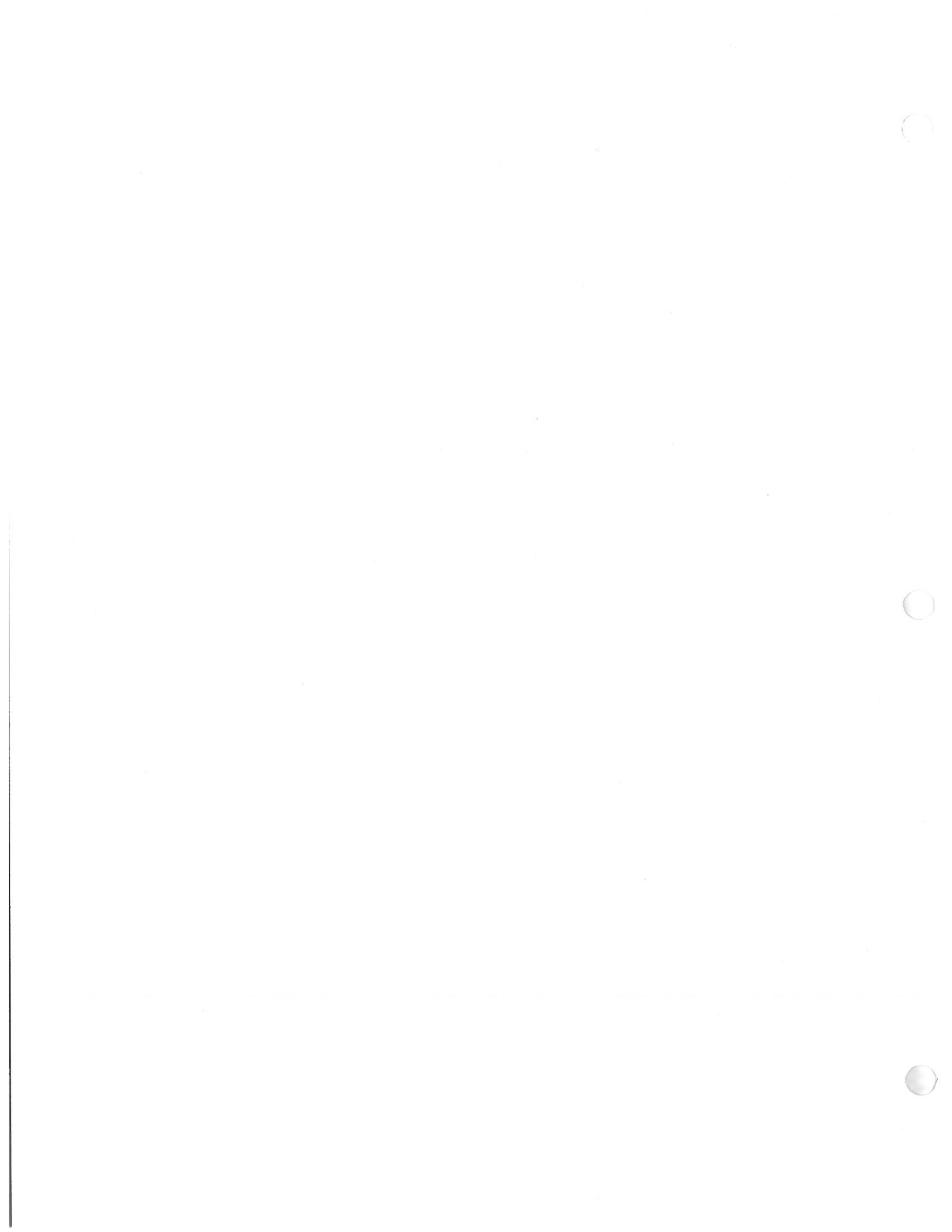
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INTRODUCTION

Project Background

The 327 acre Bob and Crystal Rilee Park is located near the summit of Parrett Mountain in Yamhill County. The property was acquired by the Chehalem Park and Recreation District in 2013 and was previously known as the Parrett Mountain Farm. Its features include the original farm house with its surrounding farm outbuildings, a second residence that was the former Parrett Mountain School, four agricultural fields located on the flattest portions of the site, second growth forests on the remainder of the site, and a network of hiking and equestrian trails.

Crystal Dawn Smith Rilee, was the great granddaughter of Samuel Parrett, the original homesteader. It was her wish that the land be held in one unit and not to be developed and sold off. The Park District's goal is to respect the wishes of Crystal Rilee and the foundation she formed for people to enjoy the land and the beauty of nature and protect the property against any future residential or business development.

Upon Crystal Rilee's death, the foundation started managing the property in 2007 for the benefit of its paid membership and made improvements to the property including renovating the original house, creating a central event garden, a wedding gazebo, patio, commercial kitchen, and started working on a living history museum. Trails were improved for equestrian use and a parking lot was developed for events.

Historical use of the trails by neighboring equestrian users shows the interest from the community for continued equestrian use. The opening of the trails for public use has been warmly received by equine enthusiasts. The Park District is making the house and event space available for functions on a limited basis.

The District has filed a land use application with Yamhill County for a conditional use permit to allow park use on the Exclusive Farm (EF) zoned property. The agricultural fields are currently leased to a dry land farmer and the Park District will continue with that arrangement for the near future.

The Parks Board has hired WHPacific to prepare an environmental assessment and site analysis of the property and identify opportunities and special attributes of the property. The Chehalem Park and Recreation District will be seeking public input while goals for the property are being formulated.

CPRD District goals for the park include:

1. Capture the community's desire for recreation facilities balanced with the District's assets to heighten the quality of life for the District residents.
2. Showcase the farming heritage of the land and homesteading in the Yamhill Valley.
3. Respect the constraints of the land and minimize unforeseen and negative impacts of future use or development.
4. Carry on the tradition of equestrian use of the trails.
5. Manage the property for outdoor recreation and make trail improvements for hiking and mountain biking.
6. Maximize economic and operational opportunities.
7. Capitalize on the scenic and nature park qualities.
8. Manage the house and gardens for limited events.
9. Continue leasing the agricultural fields for farming and income to the District for the improvement and development of the Bob and Crystal Rilee Park.

This report will serve as the baseline of information to guide the master planning and operation of the park moving forward. The Park District is holding ongoing meetings with the public and will use the evaluations of this report for subsequent meetings with the community as the future use and benefits of the park are being developed.



Parrett Mountain Farm



Century Farm

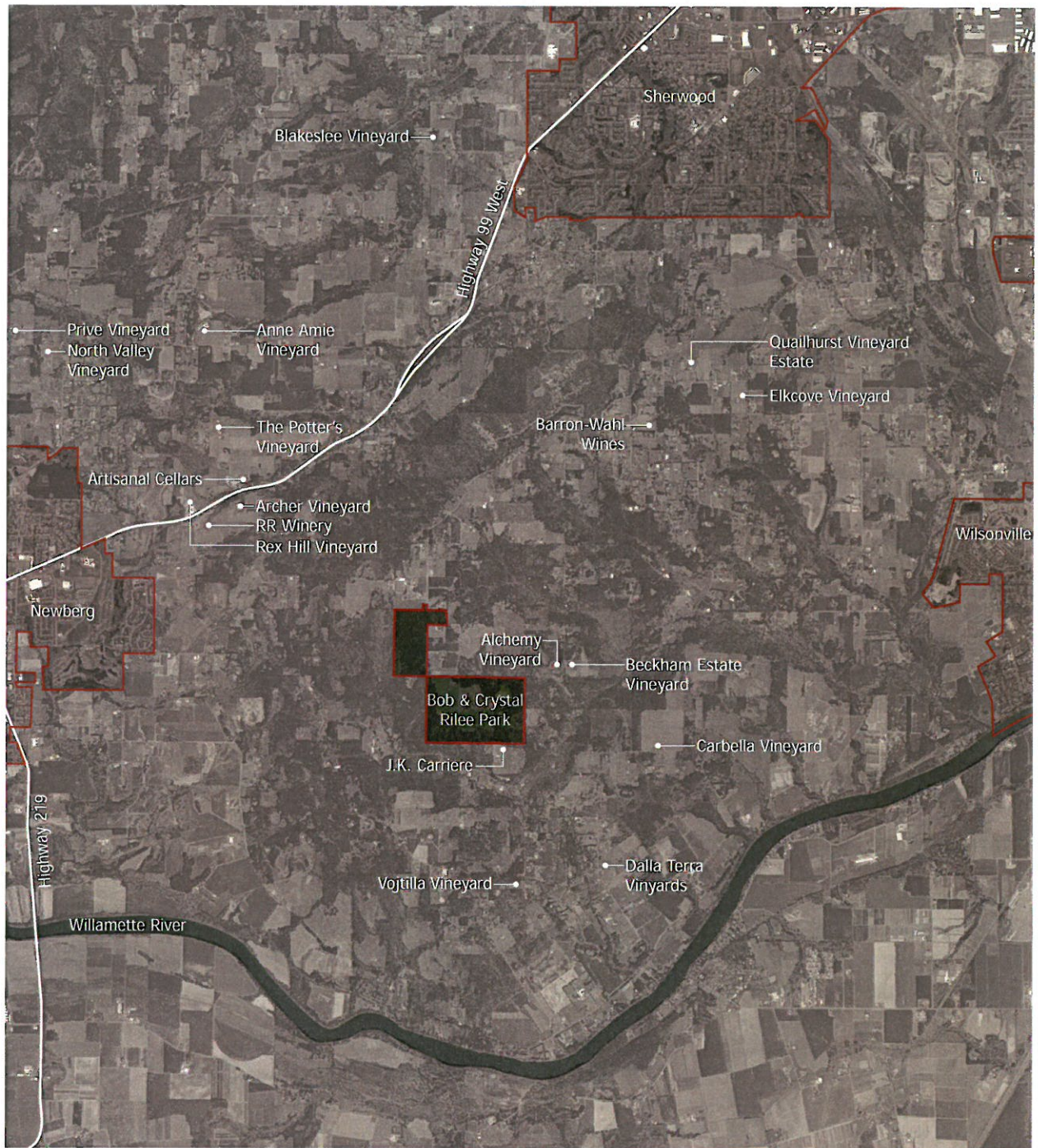


Painting From The Parrett Mountain Farm

Regional Context And Land Use

The entire 327 acre parcel is zoned EF-40, which is Yamhill County's Exclusive Farm Use District and is generally applied to large, relatively flat properties. The purpose of this designation is to identify and protect land that is suitable and desirable for commercial agricultural operations and other uses which are compatible with agriculture.

The County's Zoning Ordinance allows conditional uses in the EF district which can include community centers, parks, or playgrounds owned by a governmental agency or a nonprofit community organization, and operated primarily by and for residents of the local rural community, subject to Site Design Review and approval.



CONTEXT MAP



Not To Scale
Figure 1

Site History

Bob and Crystal Rilee Park is located in an area of rich Native American and pioneer history. The archaeological records reveal that human occupation of the area dates back as far as 12,000 years ago and was in use continuously or nearly continuously during the last 3,000 years (Aikens et al. 2011). Ethnographic evidence shows that Pre- Euro-American contact, Parrett Mountain was located in the territory of the Tualatin band of the Kalapuya whose descedants are now part of the Confederated Tribes of Grand Ronde (Zenk 1990).

Early Euro-American settlers arriving in the Willamette Valley in the mid-nineteenth century included Samuel and Maria Everest Parrett who, along with two of Samuel's brothers, William and Henry, emigrated from Kent, England and arrived in Oregon Territory in 1853. Following their arrival, the brothers made Donation Land Claims totaling 650 acres on and around the landform now known as "Parrett Mountain". Their land claims encompass what now is the Bob and Crystal Rilee Park (Cornett and Smith 2008; McArthur 1926; Rhode 2011).

Throughout the years, the Parretts farmed a variety of crops including hops which led to an interesting period in the property's history when Chinese laborers came to work the hop fields (Cornett and Smith 2008; Reynolds 2006). Sections the original 650 acres stayed in the Parrett family over the years and in 1957, two different descedants of Samuel and Maria Everest Parrett applied and succeeded in having their farms (one forty acres parcel and one eighty acres parcel) designated as "Century Farms" (Oregon State University 2016). The Oregon Century Farm & Ranch Program recognizes farmers and ranchers who have worked the same land for at least 100 years. (Oregon Century Farm & Ranch Program 2016).

In 1942, a portion of the Parrett property came into the hands of Crystal Dawn Smith Rilee, a great-granddaughter of Samuel and Maria Parrett. In March of 1953 Crystal and her husband, Robert C. Rilee, settled on the old family farm on Parrett Mountain. Crystal was passionate about documenting her family heritage and the importance of Oregon history.

Before her death in 2006, Crystal bought back much of her family's historic holdings as suburban development began to encroach on Parrett Mountain. By 2006 she had acquired 418 acres in total, a large portion of the original family's 650 acre holding (Rhode 2011).

After Crystal passed away, her land became the property of the Crystal Dawn Smith Rilee Foundation. Chehalem Park and Recreation Department purchased it in 2013. The property now includes a farm house and various outbuildings and the old Parrett Mountain School House. Chehalem Park and Recreation District intends to continue in the spirit of the Crystal Dawn Smith Rilee foundation by maintaining ties to the historic nature of the property. The full Class I Cultural Resource Report is attached in the appendix.



"Century Farm"



Tractor - Came With The Farm



Henry Parrett House



Property Outbuilding



Farm House



Tiller - One Of Many Farm Relics



Parrett Mountain School House



ENVIRONMENTAL ASSESSMENT AND SITE ANALYSIS

Existing Conditions

A site assessment was conducted to understand the existing conditions of specific resource areas and recreation facilities found at Bob and Crystal Rilee Park. In order to assess these conditions, staff biologist and trails specialists conducted a survey of the property to identify and evaluate specific resource areas, the conditions of the trails and the user experience. These following resource area were mapped or described as per this report.

- Site Hydrology - Waterways, Wetlands, Creeks
- Soils and Topography
- Plant Communities
- Fish and Wildlife
- Cultural Resources



Legend

 Property Boundary

BOB & CRYSTAL RILEE PARK

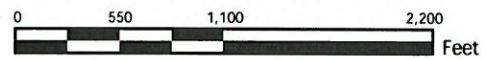


Figure 2

Site Hydrology

Rilee Park is located in the headwaters of the South Fork of Corral Creek, which flows east to its confluence with the Willamette River near Wilsonville. Five known small tributaries originate in the park, Kimball Creek and four other unnamed creeks occupy deep ravines.

Four of the tributaries capture flow off ridges of the hills toward the south, while another flows east. The tributary of Kimball Creek has perennial flow where it passes through the northeastern corner of the park.

The streams begin as ephemeral drainage ways, flowing only in response to storm events, and form defined channels with intermittent seasonal flow further downstream. The portion of Kimball Creek that is on the property and another south-flowing stream are intermittent streams. The other south-flowing stream has a defined channel but apparently has only ephemeral flow.

Some of the streams originate in small seeps or springs. There is a small wetland area along the unnamed tributary of Corral Creek, which provides baseflow to the stream. There is a concrete structure next to the channel, apparently an old cistern that taps the aquifer discharge. There is a second wetland seep in the drainage tributary located south of Dani's Field. Apart from along the stream bottoms, wetlands are absent from the park.



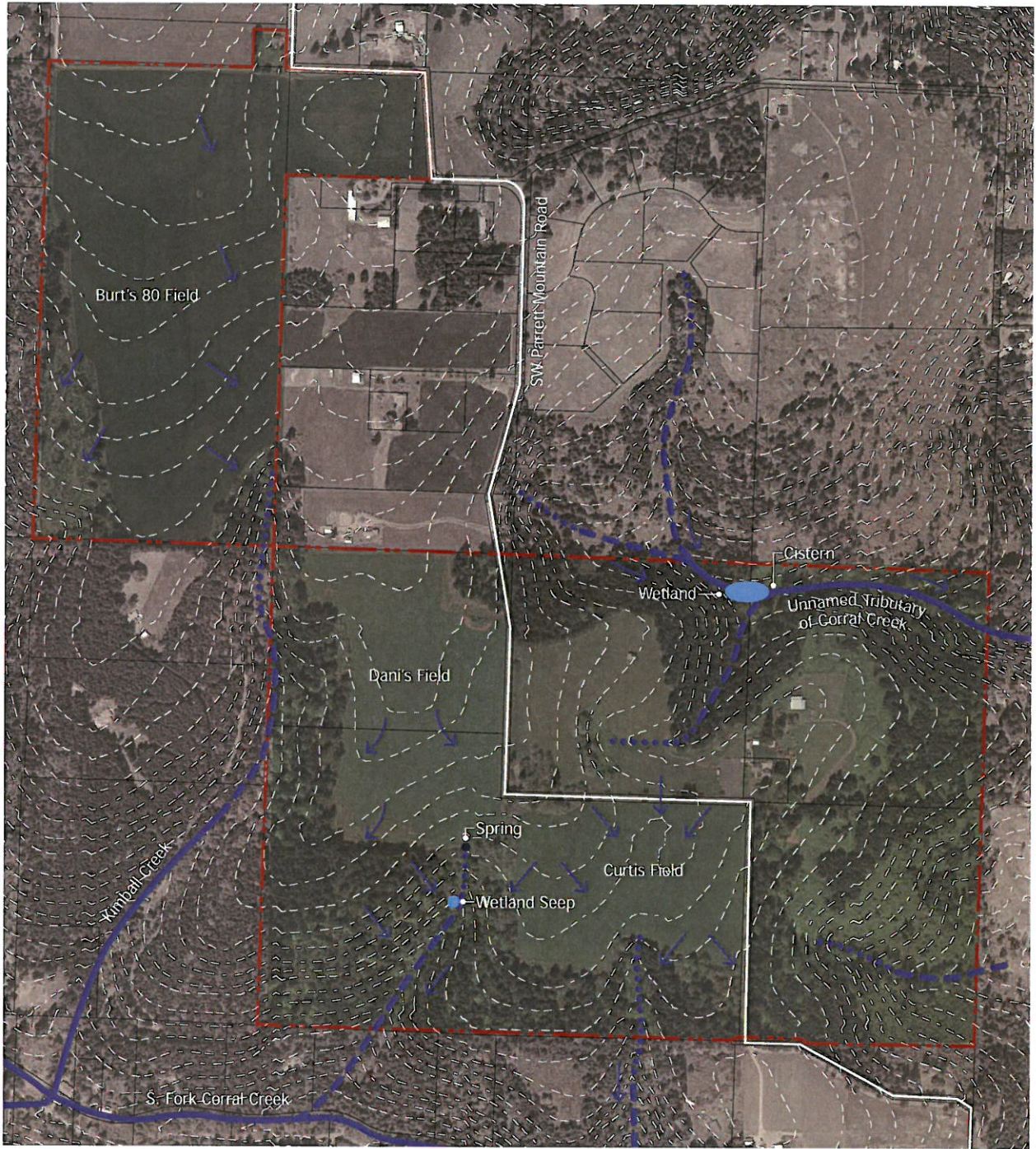
Intermittent Stream



Headwater Seep Of Small Stream



Cistern



Legend

- Drainage Direction
- Ephemeral Creek
- - - - Intermittent Creek
- Perennial Creek
- Wetland

WATERWAYS, WETLANDS, AND DRAINAGE PATTERN

Data Source: Yamhill County, Oregon GIS

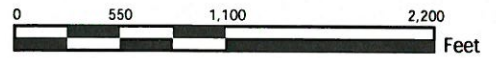


Figure 3

Soils and Topography

Rilee Park is situated on Parrett Mountain, an area of rounded hilltops, with lower slopes leading down to steeper ravines. According to the Yamhill County soil survey, Parrett Mountain is predominantly an area of Jory clay loam soils, which were formed in colluvium derived from weathered basalt.

Slopes range from gentle (2-7%) to steep (up to 60%). Jory clay loam is characteristically dark red brown in color, and while classified as well-drained. The soil texture is very sticky when wet. It is classified as an "agricultural soil" (Capability Class II to IV depending on slope). As slopes get steeper the soil depth to bedrock becomes thinner.



Legend

JRB	Jory Clay Loam	2-7% Slopes
JRC	Jory Clay Loam	7-12% Slopes
JRD	Jory Clay Loam	12-20% Slope
JRE	Jory Clay Loam	20-30% Slopes
JRF	Jory Clay Loam	30-60% Slopes

SOILS AND TOPOGRAPHY
 Data Source: Yamhill County, Oregon GIS

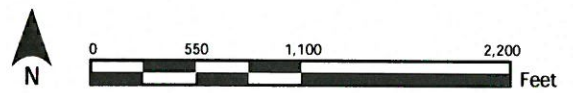


Figure 4

Plant Communities

Rilee Park supports six distinct plant communities:

- Coniferous woodland
- Mixed conifer and hardwood
- Himalayan blackberry thickets
(recently logged)
- Oak woodlands
- Farmland (cropland and pasture)
- Brush (recently logged)

In addition, the area around the farmhouse and outbuildings has lawns, flower beds and legacy homestead trees such black walnut and giant sequoia (Appendix: Plant list).

There are two main areas of coniferous woodland, one along the southern boundary and southwestern side of the property, and one north and east of the homestead. The dominant conifer is Douglas fir, with Western red cedar found in the shady ravines.

Bigleaf maple, red alder, Oregon white oak, and choke cherry are intermixed, along with madrone, which is found to a higher degree on drier south and west facing slopes. The understory shrubs are well developed, and include common associates such as snowberry, Pacific ninebark, thimbleberry, serviceberry, Oregon grape, hazelnut, oceanspray, and poison oak.


The poison oak is found more in drier south and west facing slopes, and is sprinkled among the other species, in both bush and vine form. The herbaceous layer is well-developed where there is sufficient light penetration. Sword fern is the main dominant species in the understory. Henderson's sedge and short-scale sedge are common grass-like in the shady under story. Solomon's seal, Miner's lettuce, inside-out flower, and Oregon iris. An abundant invasive species of the forest floor is shiny geranium.



Forest Floor



Legend

- | | | | |
|---|----------------------|---|----------------------------|
|  | Active Farmland |  | Mixed Conifer and Hardwood |
|  | Himalayan Blackberry |  | Coniferous Woodland |
|  | Brush |  | Oak Woodlands |

PLANT COMMUNITIES



Figure 5

The conifers are mostly to 2-3 feet in diameter at breast height (DBH), and range in age up to approximately 40-60 years. There are at least two legacy Douglas firs left from pre-logging days that are 5 feet or more in diameter (DBH). We observed stumps from the springboard logging era (1920s or earlier), with the characteristic notches cut in the bases, suggesting some parts of the stand are older than 60 years.

An area that was logged along the western edge of the park has young regeneration of Douglas fir, along with open brushy areas with dense shrub growth. Poison oak is particularly large and prevalent, and the area has been invaded by large patches of Scots broom. The open areas are very conducive to wildflowers. Identified on site were the Oregon iris and tall bluebells in bloom.

Himalayan blackberry has invaded former clearcut areas and other disturbed areas. Blackberry forms dense thickets that mostly exclude other species, and can spread rapidly. Blackberry is particularly prevalent north and east of the homestead and in a clearcut area southeast of the homestead.

Small Oregon white oak stands are found next to the open fields along Parrett Mountain Road. They are mostly open beneath the canopy, with sparse snowberry and thimbleberry. They occupy drier, south facing slopes. It may be speculated that these oak stands were historically much more extensive before agriculture on the upper hillsides.

There are three large cultivated fields that occupy the hilltops and gentle slopes: Dani's Field, Curtis Field, and Burt's 80 Field. Currently, they are planted to hay and clover. A smaller pasture is found around the valley to the west of the homestead.



Himalayan Blackberry



Oregon Iris



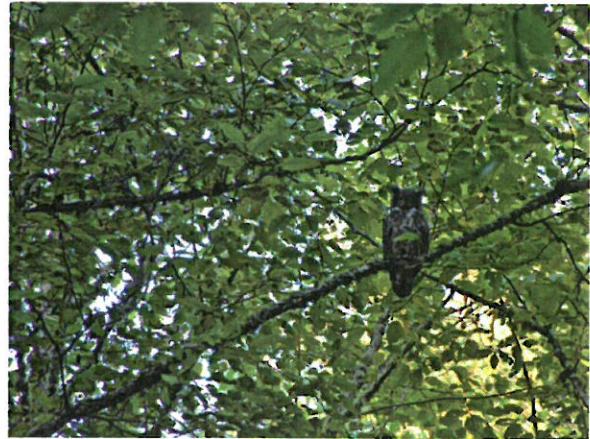
Young Conifer Growth Adjacent to Field

Fish and Wildlife

There is no documentation on the StreamNet web site of fish populations in Corral Creek. However, the perennial stream potentially supports a resident population of cutthroat trout or sculpin. This is not to say, however, that the streams in the park are not important to fish populations. Small intermittent headwater streams provide inputs of leaf detritus that when decomposed feed invertebrates that in turn support fish populations further downstream.

Extensive woodlands with relatively undisturbed corridors between them typically support a range of wildlife species. We expect black tailed deer and small mammals such as skunk, raccoon, opossum, and squirrel to utilize the wooded areas of the park, and sometimes the open fields. Coyote are the most abundant predator species. But we would also expect mountain lion and black bear to be present, though rarely seen.

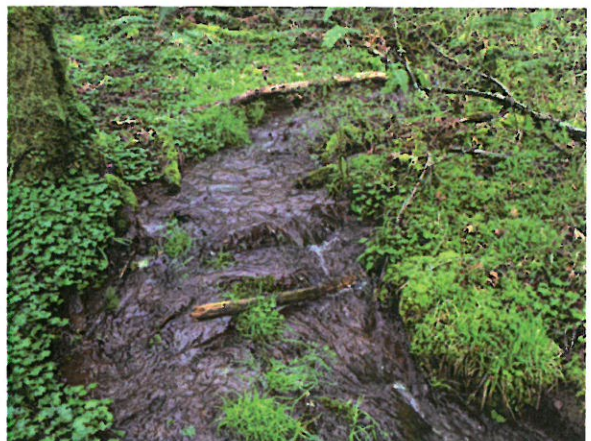
Along with typical resident songbird species, migratory species such as warblers utilize the tree and shrub canopies in season. Common raptors include red tailed hawk. Cavity nesters include woodpeckers. We observed evidence of pileated woodpecker feeding: rectangular cavities excavated in snags. An important sighting was a great grey owl, which was seen roosting in a tree. These birds range widely over the northern US and Canada in extensive coniferous forests. Great horned owl can be expected to be present also.



Owl



Animal Skeleton



Perennial Creek

Groundwater Wells

Parrett Mountain, including the Rilee Park property, is designated a "Ground Water Limited Area (GWLA) by the Oregon Water Resources Commission. Ground water aquifers in this area are isolated in volcanic rock and heavy pumping has caused declines in the water.

Ground Water from the basalt aquifers in the Parrett Mountain Ground Water Limited Area is classified for the following exempt uses only:

1. Stock Watering.
2. Lawn or non-commercial garden watering of not more than 1/2 acre in area.
3. Single or group domestic purposes of no more than 15,000 gallons per day.
4. Single industrial or commercial purposes not exceeding 5,000 gallons per day.
5. Down-hole heat exchange uses.

The well logs on file with the Oregon Water Resources Department report that eighteen wells are recorded in the same section as the park property. All wells are recorded for domestic use. Drilling depths ranged from 95' to 625', with nine wells over 500' deep.

One well yielded 100 g.p.m. at 135' depth; however, its exact location was not identified. Yields ranged from 0 to 30 g.p.m. with most in the 10 – 18 g.p.m. range. One was recorded as dry hole after drilling 360'. Most of the drilling hit basalt rock between 20' – 35' below the surface.

It appears the two wells on the park property were not recorded, assuming they were drilled prior to the implementation of a recording system. It is recommended that the Park District perform yield tests on the two unrecorded wells (Appendix: Well logs)