

View of Tualatin Valley from NW Bishop Road

## Helvetia

Photo by Cherry Amabisca

Our Sustainable Treasure

Monday, May 6, 13

#### What is Sustainability?

#### What is "sustainability"?

- The quality of not being harmful to the environment
- Not depleting natural resources
- Supporting long-term ecological balance

Source: dictionary.reference.com

#### Where is Helvetia?

- Exit 61 North of US-26 (Sunset Highway)
- West of Cornelius Pass Rd
- East of Jackson School Rd.
- South of Skyline Blvd.



Exit 61 to Helvetia Photo by Cherry Amabisca

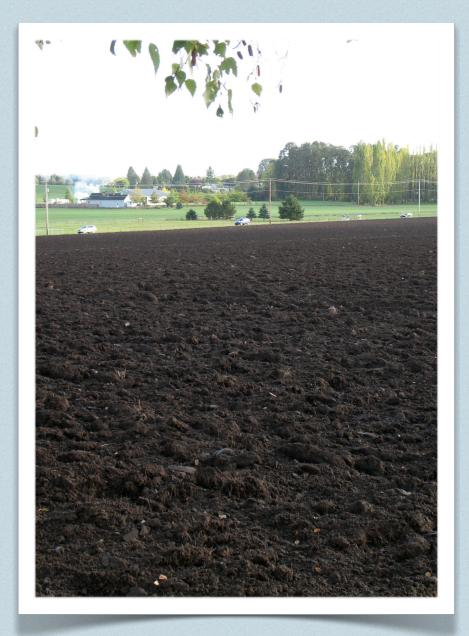
What Contributes to Helvetia's Sustainability?



- \* Hydrology/Drainage
- \* Careful management: crops and environment
- Balance between humans and habitat
- \* People

#### Helvetia's Premier Soils

- All soils worldwide are classified by capability
- Range from Class I (BEST) to Class 8 (WORST)
- An area will rarely have all one type - usually a %
- Helvetia has rare high concentration of Class 1 -28%

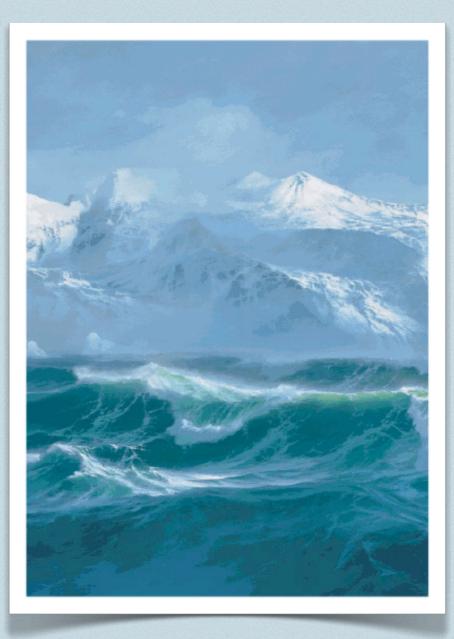


Willamette Silt Loam soil on NW Helvetia Road Photo by Cherry Amabisca

# Why are Helvetia soils so productive?

#### It Started in the Last Ice Age

- Periodic sudden ruptures of the ice dam on the Clark Fork River that created Glacial Lake Missoula in Montana.
- Evidence of at least 25 massive floods between 13,000 and 15,000 years ago.



Ice age floods: Suicide Point - Hells Canyon, ID iceagefloods.blogspot.com

#### Missoula Flood Path

- After each ice dam rupture, waters rushed down the Clark Fort (ID)
   & the Columbia River (OR)
- Flood waters scoured much of Eastern Washington and Oregon's Willamette Valley



Ancient Lake Missoula and the Missoula Ice Age Floods geology.isu.edu

#### What Washington State lost...

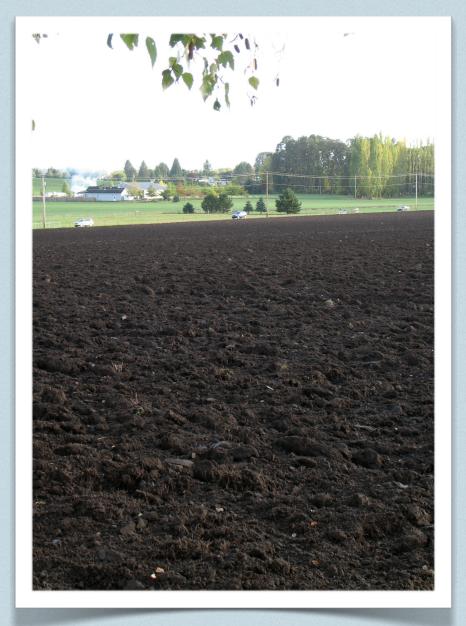
 Missoula Floods carried away eastern Washington's Class 1 and 2 soil, leaving "scablands"



Scabland Channel cut by Glacial Lake Missoula floodwater. hugefloods.com

...Oregon gained

Missoula Floods deposited premier Class 1 and 2 soil throughout the Willamette Valley - the best in the world!



Willamette Silt Loam soil on NW Helvetia Road Photo by Cherry Amabisca

#### What are the benefits of Helvetia's Class 1 & 2 Soils?

- Excellent tilth (suitability for sowing seeds)
- Excellent water retention
- Higher yields per acre
- Diverse crops



Wheat growing on NW West Union Road Photo by Adrian Amabisca

What Contributes to Helvetia's Sustainability?

\* Soil

#### \* HYDROLOGY/DRAINAGE

- \* Careful management: crops and environment
- Balance between humans and habitat
- \* People

### What is "hydrology"?

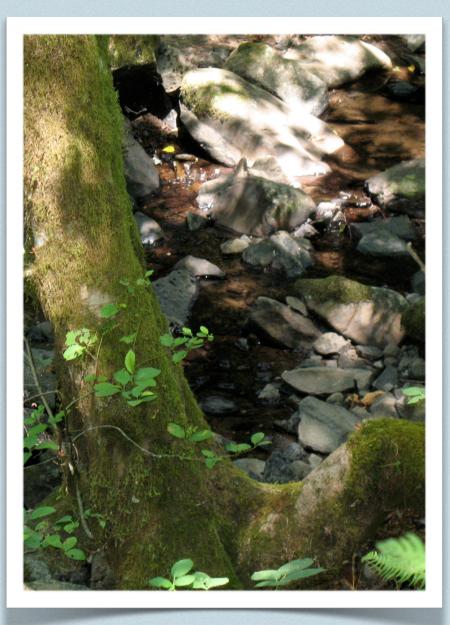
### What is "hydrology"?

- Greek "hydro" = water
- Greek "logos" = study
- The study of the movement, distribution and quality of water on Earth and other planets.
- Includes the hydrologic cycle, water resources and environmental watershed sustainability
- \* Source: Wikipedia

#### Helvetia's Streams

Helvetia's four creeks are part of the Dairy-McKay sub-watershed which drains into the Tualatin River Watershed:

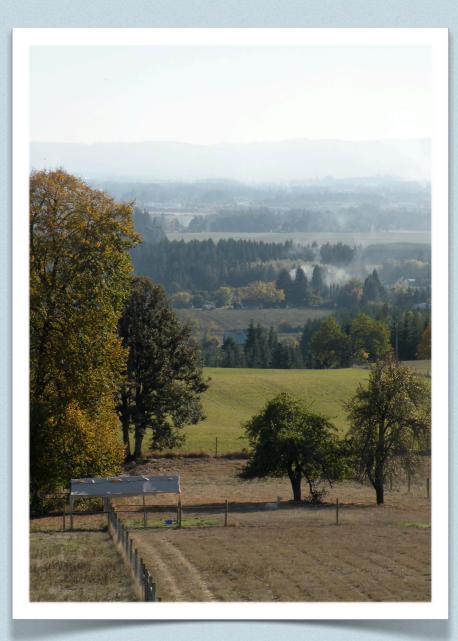
Jackson Storey Waibel Holcomb



Jackson Creek on NW Jackson Quarry Road Photo by Cherry Amabisca

#### Helvetia's Topography

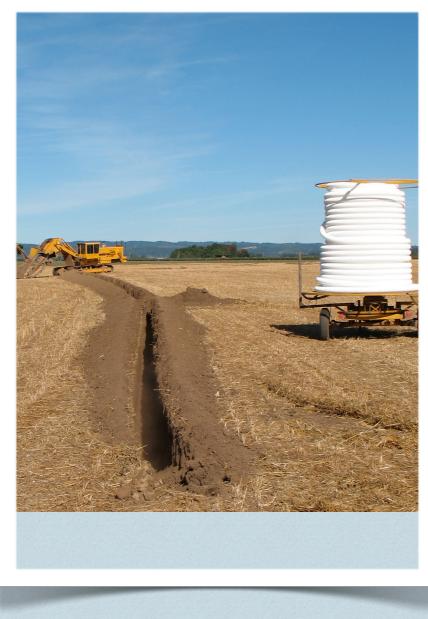
- Gentle, south-facing slopes
- Rain water drains southward from the Tualatin Mountains



South-facing fields slope down from the Tualatin Mountains. Photo by Cherry Amabisca

#### Helvetia's Field Tiling

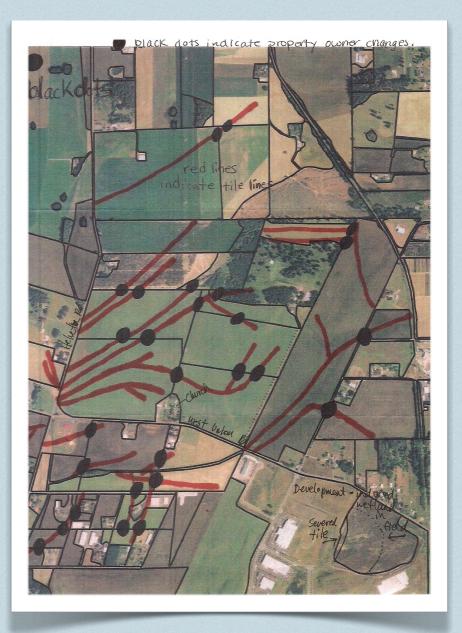
- Farmers have installed subsurface drainage system over past 80 years
- Originally clay tubes now perforated plastic
- Significant capital investment
- Interconnected system crosses property lines



Field Tiling being installed in trenches Photo by Cherry Amabisca

#### The Benefits of Field Tiling

- Effective way to drain thousands of upland acres
- Reduces "wet feet" for crops
- Eliminates flooding
- Optimizes crop production



Map of field tiling north and south of NW West Union Road - Intel site lower right

What Contributes to Helvetia's Sustainability?

\* Soil

- \* Hydrology/Drainage
- \* CAREFUL MANAGEMENT: CROPS and ENVIRONMENT
- Balance between humans and habitat
- \* People

#### How Do Helvetia Farmers Practice Sustainability?

- Conserve water resources
- No irrigation less energy inputs - smaller carbon footprint
- Rotate crops
- Plant cover crops to restore nutrients to soil



Red Clover planted on NW Helvetia Road Photo by Adrian Amabisca

#### Helvetia's Diverse Crops

- \* Wheat
- \* Clover
- \* Grass Seed
- \* Hay
- \* Nursery Stock
- \* Fruits and vegetables
- \* Hazelnuts

#### Helvetia's Sustainable Farms

- Helvetia farmers have
   been productive over 150
   years
- Over 40 farming families make their living solely by farming (5,000 acres)
- Six Century Farms within
   2 miles:, Batchelder,
   Bishop, Gates, Guerber,
   Pieren, Yungen



Gates family Century Farm - NW West Union Road - 309 acres. Photo by Cherry Amabisca

#### Helvetia's Sustainability = Nature + Nurture

- Class 1 and 2 soils, nutrient-rich topsoil
- South-facing slopes, enabling earlier crop ripening, drainage
- Ample natural water

 Sustainable, creative soil management: Integrated drainage system (field tiling) Crop rotation Cover crops

#### How We Benefit from Helvetia's Sustainability

- World class quality of crops
- Long-term productivity -150 years
- Highest yields in valley
- Local availability of fresh foods
- Maintain natural resources



Steve Radtke, CSA farmer, Helvetia Photo by Mishelle Radtke

#### How We Benefit from Helvetia's Sustainability

- Milk (Dairygold)
- Hazelnut Bread (Franz Bakery)
- Fresh fruit & vegetables
- Swiss bread and pastries
- Hazelnut milkshakes
   (Burgerville)





Swiss breads from Sweetrock Bakery, vegetables from local CSA's. Photos by Faun Hosey

#### Sustainability Example: Helvetia Hazelnuts

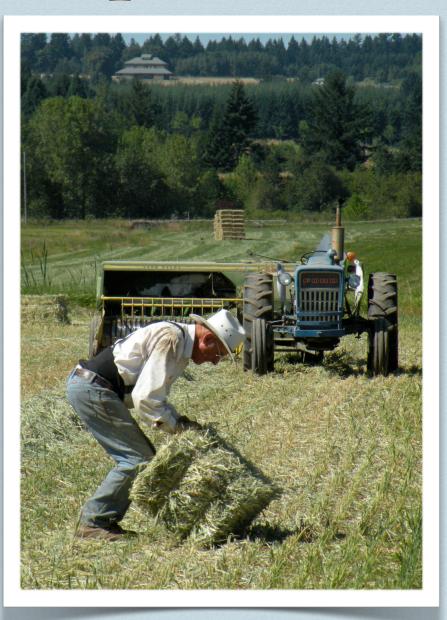
- Orchards planted in 1940's, still producing after 70 years
- Replanting with new OSU variety to avoid blight
- Hazelnuts take 16 years to mature
- Will continue producing for 150 years



Don Schoen, Rollin'Acres Hazelnut Farm -2nd generation. Photo by Cherry Amabisca

#### Sustainability Example: Diverse Crops

- Crop rotation: clover, wheat, grass seed, hay
- Use natural rainwater
- Plant cover crops
- Channel excess water underground
- Productive for over 100 years



Elmer Grossen, 90+ years old, 4th generation Photo by Adrian Amabisca

### Sustainability Example: Local Foods

- CSA's (Community Supported Agriculture) offer subscriptions
- Membership fee allows farmers to pre-plan crops
- Fresh fruit & vegetables provided all year round
- Members know how their food is grown



Lyn Jacobs and Jacob Argueta of La Finquita del Buho CSA. Photo by Cherry Amabisca

What Contributes to Helvetia's Sustainability?

\* Soil

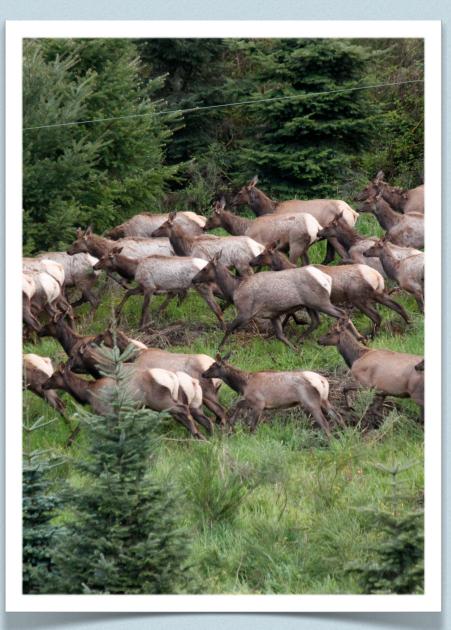
- \* Hydrology/Drainage
- \* Careful management: crops and environment

#### \* BALANCE BETWEEN HUMANS and HABITAT

\* People

#### Helvetia's Natural Resources

- 100+ herd of Roosevelt elk use Helvetia as habitat
- Depend upon Helvetia for food, forage, shelter and calving
- Range up to 50 miles a day
- From Forest Park to Coast Mountains



Roosevelt elk herd near NW Yungen Road May, 2012. Photo by Adrian Amabisca



Baby elk unable to jump fence; left by berd Photo by Adrian Amabisca. July 21, 2009

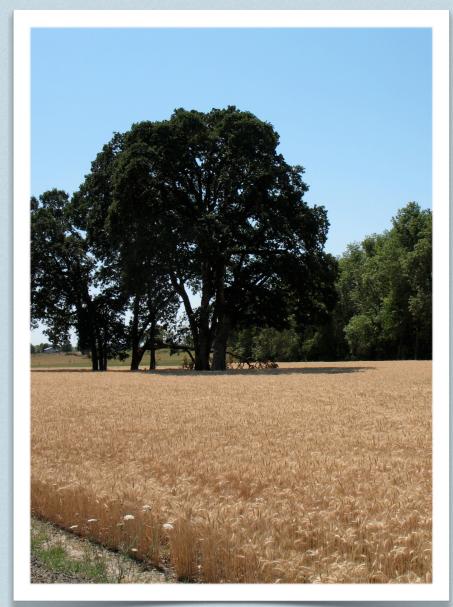
Helvetia elk spooked by UPS truck on NW Yungen Road Photo by Adrian Amabisca. May 4, 2012

### Conflict with humans

More fencing and more traffic reduce habitat; leads to stress and failure to thrive. Foraging on cover crops causes farmers to lose soil nutrients.

#### Helvetia's native Oregon White Oak trees

- Some as old as 500 years, most about 250 years old, about 5,000 in Helvetia
- Less than 1% of historic
   Willamette Valley native
   oak habitats still exist
- Metro regards Oregon white oak savannas and woodlands as "habitats of concern"



Native Oregon White Oak savanna on NW Helvetia Rd. Photo by Cherry Amabisca

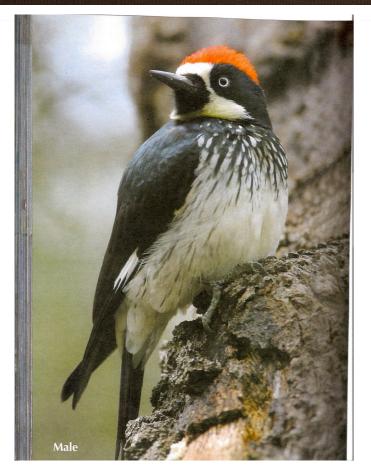




Oregon white oak cut down for development at Jacobson Road, inside UGB, across from Credence/IEP About 150 years old

### Habitat Conversion

Biggest threat to Oregon white oaks is conversion to urban uses, leads to island habitats, unsuitable habitat



Acorn Woodpecker (Melanerpes formicivorus)





Western Bluebird (Sialia mexicana)

#### White-Breasted Nuthatch (Sitta carolinensis aculeata)

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These species depend upon Oregon white oak for habitat (survival). Population/habitat threatened.

Vulnerable Species

#### Helvetia's Red-Legged Frogs

- State listed as sensitive species (population in decline)
- Disburse over wide territory
- Need room to "breathe"
- Threatened by development, loss of habitat



Red Legged frog found off NW Bishop Road Photo by Adrian Amabisca

What Contributes to Helvetia's Sustainability?

\* Soil

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- Careful management: crops and environment
- Balance between humans and habitat

#### \* PEOPLE

#### Atfalati (Tuality) People

- Pre-European settlement tribes used Helvetia for seasonal encampment
- Chatakuin "place of big trees" (Five Oaks)
- Their trails to Columbia
   River became Cornelius
   Road, Bishop Road, Logie
   Trail



Panel from display at Five Oaks, Jacobson Road Photo by Cherry Amabisca

# Atfalati nurtured Helvetia's natural resources

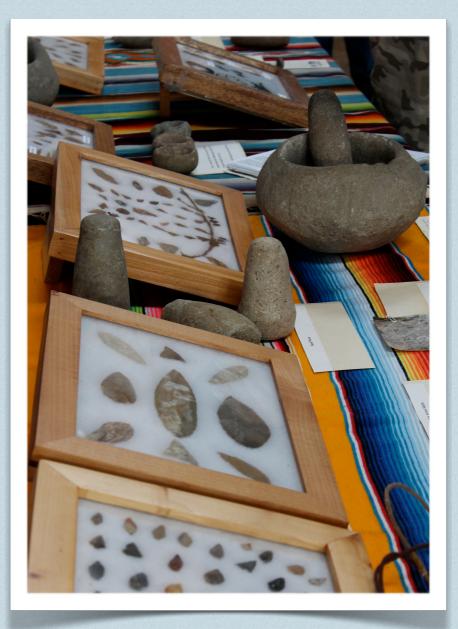
- Nurtured growth of Oregon white oak - 3 generations for acorns
- Ground up acorns from
   Oregon white oaks for
   mush
- Revered the feathers from the Acorn Woodpecker and elk teeth



Chief Kennedy of CTGR at 2012 Helvetia Culture Fest. Photo by Adrian Amabisca

#### Atfalati left imprint in Helvetia

- Thousands of artifacts found in Helvetia (Boehler, VanDomelen collections)
- Farmers: Best time to find artifacts - plow after rain
- Decimated by disease
- Atfalati forced to join
   Confederated Tribes of
   Grand Ronde in 1855



VanDomelen collection on display at 2012 Helvetia Culture Fest. Photo by Faun Hosey

#### Atfalati heritage interpreted

- Atfalati heritage is maintained by CTGR (Confederated Tribes of Grand Ronde)
- CTGR co-sponsors annual Helvetia Culture Fest
- Perform traditional tribal songs and demonstrate crafts, interpret artifacts



Tribal representatives from Confederated Tribes of Grand Ronde participate in annual Helvetia Culture Fest. Photo by Faun Hosey.

#### Pioneers Homestead in Helvetia - 1840's

- West Union School established in 1851
- West Union Baptist Church founded by David Lenox in 1844, Captain of 1st wagon train to cross Rockies. National Register of Historic Places
- Chambers house (1865)



West Union Baptist Church est. 1844 Photo by Adrian Amabisca

### Swiss discover Helvetia, Oregon - 1870's

- Swiss immigrants arrived in several migrations between 1870's to 1890's.
- In 1892, they coined the name "Helvetia", meaning "Switzerland" in Latin.
- Helvetia Community Church built in 1899

Photos by Cherry Amabisca



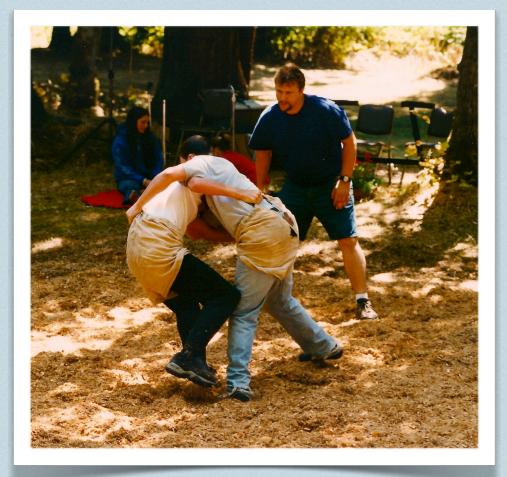




# Swiss Families you may recognize...

Badertscher Bauer Berger Bishop Buehler Claus Danzer Dapp Dick Dysle Feuerstrom Frantz Fuegy Gaus Grand Grossen Guerber Gutschmidt Gyger Haefliger Hager Hanson Heitzenreter Hemmy Hildbrand Hoffman Jaggi Jossy Kamp Kaufman Kestek Korn Kunrad Kuralti Lauber Linder Losli Meier Nussbaumer Paegel Petersen Pezoldt Pieren Rahn Reichen Ritter Rufener Schiewe Schmidt Schneider Schreiber Settgast Siegenthaler Staehle Stauss Stoller Stucki Toelle Tschabold Tunstall Waefler Walters Wenger Whitten Wismer Wolf Yungen Zahler Zimmerman Zumkehr Zurcher

#### Swiss Traditions Continue 4th & 5th Generations



<image>

Schwingfest (Swiss wrestling) Helvetia Alpengluehn Singing Society since 1889

### Burning of the Boogg



The faster the Boogg's head explodes, the hotter summer will be!





Photos by Adrian Amabisca

#### Swiss Independence Day



#### Helvetia Culture Fest













Photos by Faun Hosey

### The Swiss built 'em STRONG to last LONG



From left: Pieren, Bishop, Yungen barns Can be seen along NW Helvtia Rd. Photos by Adrian Amabisca





19-year-old Fred Bischoff (Bishop) built barns and homes throughout Helvetia in the late 1800's. Barns built WITHOUT nails (morter & tenon) and still in use today.

#### So, everything's good in Helvetia, right?



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#### Helvetia faces constant threats

- Over the past 30 years, Helvetia has been coveted for *industrial* uses incompatible with agriculture and natural resources.
- Helvetia land is near the freeway, flat and has plentiful water developers, city, county see more \$\$.



Warehouses/Distribution Centers built on Class 1 and 2 Soils - former Helvetia farmland Photo by Cherry Amabisca

#### Helvetia land is at risk

\* 1970's - County DUMP SITE threatened Jackson Falls - private citizens bought the Falls to protect it.

 Iquition 1980's - State wanted four sites for LANDFILLS threatened water quality - citizens banded together as "Helvetia-Mountaindale Coalition" to oppose. Citizens won.

#### Helvetia Land is at risk

- Iggo's State planned to build two PRISONS on agricultural land near Groveland Road. Farmers form "Tualatin Lands Coalition" to defeat proposal.
- \* 1990's Private company planned to ship SHEEP
   CARCASSES from New Zealand to bury on Helvetia farmland across from West Union Elementary School. Citizens defeat proposal.

## Citizens say okay to jobs

- City of Hillsboro lobbies Metro for 1200 acres of Helvetia farmland south of West Union Road for jobs.
   Intel promises to bring in 700 R&D high paying jobs.
   Includes Liberty High School site. Citizens approve new UGB (Urban Growth Expansion) on *promise of jobs*.
- 2004 present. Farmers sell out to speculators. Some development occurs in new UGB. Intel does not build. Hundreds of acres left for weeds.

#### Vacant Industrial Lots Inside UGB s. of West Union Rd





(UGB Expansion approved in 2004)





Photos by Cherry Amabisca March 12, 2013

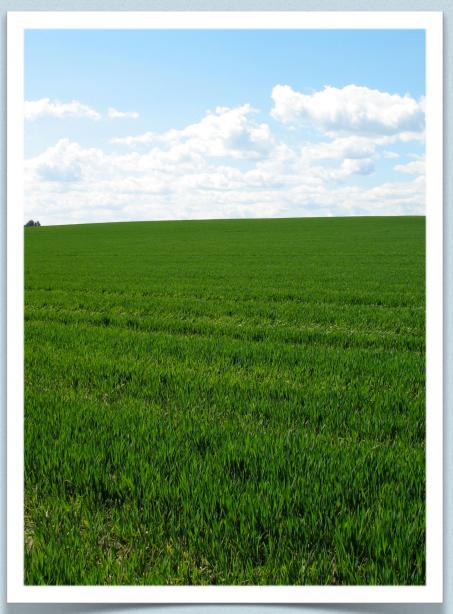
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### Citizens say "NO" to giving up more Helvetia farmland

- City of Hillsboro and Washington County target
   7,000 acres of Helvetia farmland for Urban Reserves
   for warehouses/distribution centers and medium density
   housing
- \* 2009 to 2013 Save Helvetia supporters testify in opposition at more than 50 hearings before Washington County Board of Commissioners, Metro, Land Conservation and Development Commission (LCDC/ Salem). Urban acres reduced to 800 in Helvetia, with 673 acres west of NW Helvetia Road in best Helvetia farmland.

### The "best of the best" Helvetia land still in jeopardy

- 2012 Urban Reserves not finalized yet City of Hillsboro requests 440 acres of Helvetia land for UGB expansion from Metro. Denied after opposition from Save Helvetia supporters.
- 2013 9 groups file appeals with the Court of Appeals about Reserves process.



Urban Reserves in Helvetia as far as the eye can see. Class 1 soil, 100 yr. floodplains, Waibel Creek, Oregon oaks. Photo by Cherry Amabisca.

# How do we protect Helvetia for our next generations?

# Two-pronged approach to protect Helvetia

- PREMISE: Recognize that Helvetia is a *regional* resource
- SOLUTION: Develop two groups who work to:
- Protect Helvetia's natural resources and farmland
- Share Helvetia's heritage for all to appreciate



View of Pieren barn, Helvetia Photo by Adrian Amabisca

### Save Helvetia www.SaveHelvetia.org

- Mission: To advance policies, leaders and actions that protect Helvetia's treasured resources.
- Non-profit organization
   501(c)(4)



### Save Helvetia projects



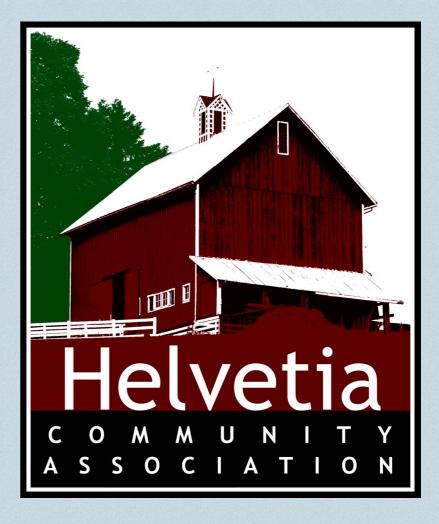
- Challenge UGB *industrial* expansions onto Helvetia farmland.
- Advocate for road and transportation projects that minimize urban traffic next to Helvetia farmland.
- Oppose legislative bills that weaken Oregon land use law.



Senator Merkley and Congresswoman Bonamici meet with local farmers. July 6, 2012. Photo by Cherry Amabisca.

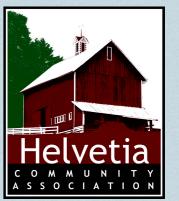
#### Helvetia Community Association (HCA)

- Mission: To inspire understanding and enjoyment of Helvetia's people, land and history.
- Non-profit cultural and educational organization 501(c)(3)



Design based on Pieren barn

## HCA Educational Projects



Helvetia Culture Fest

Educational bike rides



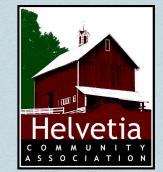
Farm tours/history tours

Digital mag "Our Helvetia"

Photos by Cherry Amabisca



### HCA Preservation Projects



Habitat restoration

- Liberty H.S. students planted 1100 native trees & shrubs
- USDA/NRCS provided trees through EQIP
   Project (Environmental
   Quality Incentive
   Project)

Liberty High School students planting native trees. Photo by Faun Hosey



New in 2013! HCA receives FIRST Conservation Easement Donation

#### What can YOU do to help Helvetia?

#### Get Informed - sign up for email

- Save Helvetia/HCA for local issues and events <u>www.SaveHelvetia.org</u>
- WCCAN (Washington County for county-wide issues
  <u>www.wc-can.org</u>

IOOO Friends of Oregon for stat <u>www.friends.org</u>

> Elizabeth Furse (Hevetia Vineyards) and Juvencio Argueta (La Finquita del Buho) discussing issues with Congresswoman Bonamici Photo by Cherry Amabisca



work)

#### Take a Stand

- Vote for officials who support agriculture and rural needs.
- Email, call or write to legislators to oppose ordinances and legislative bills that weaken land agriculture.
- Testify with us it's not too scar



Members of Save Helvetia attending oral arguments before the Oregon State Court of Appeals for the Reserves appeal - January 16, 2013

### Buy Our Stuff

- Buy our Helvetia t-shirts, hooded sweatshirts, hats.
   100% goes to HCA goals.
- Support Helvetia growers and businesses - fruits & veggies from U-Picks & CSA's, Christmas trees, lavender products
- Buy products locally with Helvetia ingredients

Helvetia products available at www.HelvetiaCommunity.org Click on "Market"





# Volunteer with our digital magazine

- Our Helvetia digital magazine launched December, 2012 - quarterly
- We need help with:
   Guest Editor 250 words
   Selling advertising
   Writing articles
   Photography
   Graphic design
   Editorial planning



### Volunteer with Helvetia Culture Fest - September 23

 Our major fundraiser and community gathering

 We need help with: Graphic design for booklet Selling advertising Publicity
 Sign placement
 Merchandise sales
 Ticket sales



Joe and Allison volunteering with Pie Walk sales Photo by Cherry Amabisca

# Join our NEW Committee & gain non-profit experience!

- Come up with creative ways to involve students in preservation and education efforts about Helvetia
- Work under the guidance of HCA Board of Directors
- Select the projects you want to work on



Megan Parra selling her custom designed poster of Helvetia Photo by Cherry Amabisca

# Thank YOU for caring about Helvetia!

May 10, 2013

Cherry Amabisca

<u>www.Helvetia</u>Community.org <u>www.SaveHelvetia.org</u>

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