

**Where Forestry Heritage**



**Meets Agricultural Heritage**



**... many farm lands were once forests ...**

*In the early part of the 20<sup>th</sup> century, farm land in the Paradise Valley area and other qathet region areas were logged and cleared of stumps using equipment such as this*

# *Steam Donkey*

*which has a*

*Boiler, Steam Engine, and Winch on a Sled*

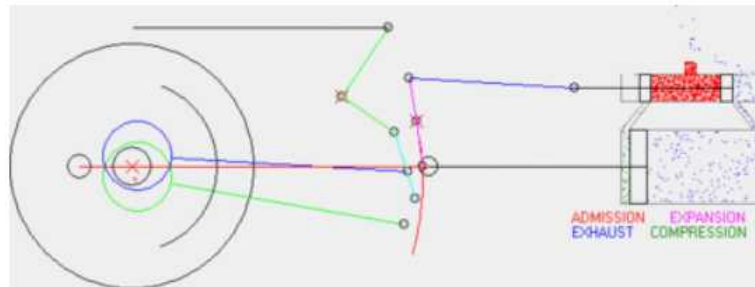
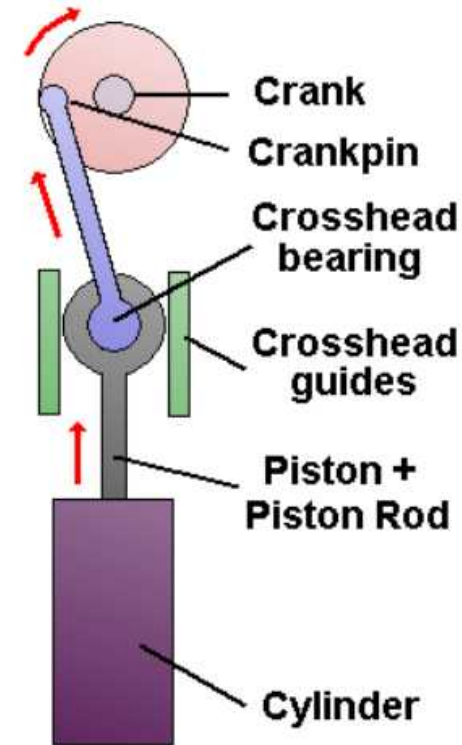
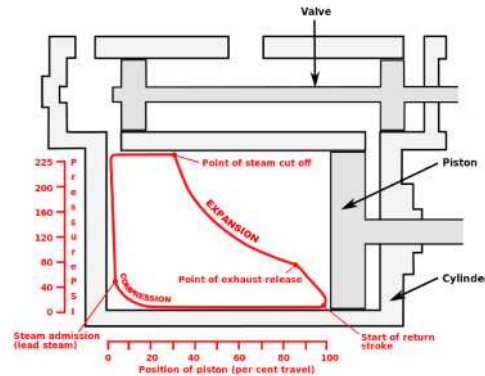
*Washington Iron Works Compound Geared Yarder No. 1619  
built in 1909 at Oak Harbour WA. Restored by the Forestry Heritage Society in 2023*

# The Boiler



- **needs a water source.** *There is no water tank here on our display, so they would require a hose to a nearby stream connected to the large boiler chamber.*
- **needs a wood supply** *a crew of several men would cut several several cords per day for the firebox.*
- **conducts smoke heat through hundreds of pipes** *from the fire chamber through the boiler where the water is converted to steam and sent through a pipe to the steam engine.*
- **normally has a smokestack** *which missing on our display. The stack was needed to help draw out the smoke and block sparks. But many forest fires were started with steam engines anyway.*

# The Steam Engine



## Converts steam pressure to mechanical rotation

- WIW #1619 Cylinder size is 10.5 x 10.25
- Steam comes into the valvebox and is switched to other side near end of the stroke
- 4 inch pipes connecting the steam and exhaust to the top of the boiler are missing

# The Winches



**#1619 has a three-**

**drum winch. Typical use near a rail head:**

- Operator can switch the drive from one drum to another
- Main line pulls logs from several thousand feet,
- lighter haul-back line takes the mainline back to the felled log area
- third drum operates the boom loading logs onto a rail car.

# *The Sled*



- We built this sled in 2023 for #1619. 5/8" drill rod holds it together*
- Steam donkeys are self propelled by connecting a cable to a tree along the path
  - Typical to have a Fairlead to guide the cables located on the front

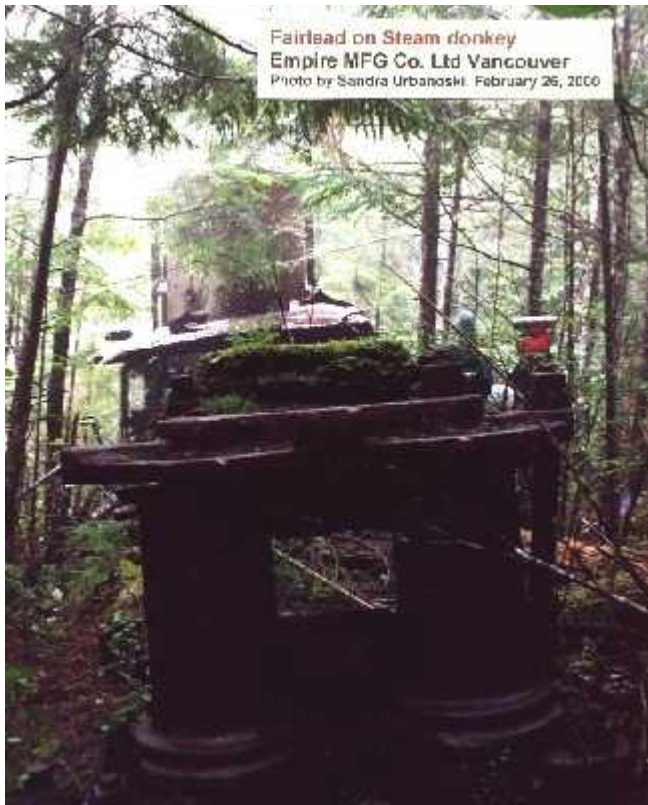
# qathet Region Steam Donkeys



Willingdon  
Beach  
Trail  
Steam  
Donkey



Above: Chippewa Bay near  
the lake.  
Right: high above Chippewa  
Bay



Fairlead on Steam donkey  
Empire MFG Co. Ltd Vancouver  
Photo by Sandra Urbanoski February 26, 2000



# Thank You!

## Sponsors and participants

*The #1619 Steam Donkey project was made possible by:*

*2012-2014:*

- Rene Bourassa for delivery of the steam donkey to the storage area, Western Forest Products for donating the sled logs, Marta Trucking for delivering them free, Dan Parsons and Vic Spreeuw for free storage until 2023, Tom Sparks for welding an engine back on*

*2023*

- Expert sled construction by Mark Mathews*
- Transport to the current site in 2023 by Jepson Booming*
- Our active 2023 Forestry Heritage tech crew*
- Farmers Agricultural Institute and the Farmers Market*

*Draft Display - corrections/suggestions are welcome to [info@prfhs.org](mailto:info@prfhs.org) or 604-413-1224*