

## Rose Gall



Photo by Emily Sarha at Hayden Lake Idaho

These red fuzzy growths found on wild and domestic roses are mossy rose galls. This gall resembles a highly filamentous and spongy ball that can grow larger than a golf ball. The center of each gall is hard, and is filled with caverns which house wasp larvae.

Galls occur when a cynipid wasp lays eggs either on the leaf or stem of the plant. A week later, larva hatches and feeds on the plant tissue. This triggers a chemical reaction within the host plant and the cells in that area grow larger to be used for nutrition for the growing larvae. Eventually the plant tissue forms the fibrous outgrowths of the gall. The galls usually occur on the surface of leaves, but they sometimes occur on stems. The galls do not appear to harm the plant.

### Possible topics of discussion:

- Community interactions in an ecosystem, parasitic relationships
- Homeostasis in an organism
- Life cycles

### Performance Standards

1 <sup>st</sup> Grade	5 <sup>th</sup> Grade	Middle School	High School
<p>1-LS-1.2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.</p> <p>1-LS-1.3. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.</p>	<p>5-LS-2.2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.</p>	<p>MS-LS-2.2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.</p>	<p>HS-LS-2.7. Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.</p>



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