

FACT SHEET : GOUTY & HORNED OAK GALL



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Gouty and horned galls are abnormal growths or swellings comprised of plant tissue found on leaves, twigs, or branches. These deformities are caused by a small parasitic wasp which deposits its eggs onto the leaves and twigs. Chemicals found during this deposition cause the leaves and branches to swell and form the large, woody galls. Most researchers say that while the galls are not attractive if only found in small numbers they may not have serious health risks for the tree. However if the galls become too severe they may girdle the twigs stressing the tree and ultimately cause stem dieback.

The horned oak gall forms small horn-like projections on the galls during the second year of its formation. It can be found on pin, scrub, blackjack, and water oaks. The gouty oak twig gall lacks the horns and has a smooth surface and can be found on pin, scarlet, red and black oaks.

Squirrels have increasingly been found chewing on the galls causing much twig and leaf ground litter from the canopy above. No one yet seems to know why they are doing this.

Life Cycle: The gall forming wasp has a complicated life cycle and a very narrow time-frame of emergence. It begins in the early part of spring as the tiny wasps emerge from woody stem galls. Females lay eggs on the veins of the oak leaf buds. Male and female wasps emerge from these tiny, blister type galls on the leaf vein about mid summer. Mated females deposit eggs in young oak twigs. The following spring and over the next two or three years the galls begin to enlarge and reach maturity until they hatch out and breed.

Prevention and Treatment: Chemical control usually is not warranted or realistically as the insect is not a major problem on healthy trees. **As always the best treatment is PREVENTION and STRESS MANAGEMENT. Keep trees free from stress (drought, nutrient deficiencies, soil compaction, mechanical damage, etc...).** Water deeply during extended periods of dry weather. **Fertilization** helps to supplement essential nutrients and condition the soil. **Practice good sanitation** by raking up and removing infested leaves and fallen galls should alleviate some future infestations. Some galls could be pruned out but may not be realistic on larger trees with larger infestations.



Left: Horned Oak Gall.

Photo taken by: Northeastern Area Archive, USDA Forest Service, Shawnee National Forest.