

**Q: My tree oak is losing it leaves and dropping a bunch of tiny seeds that keep jumping around on the ground for days, making popping sounds. What is wrong with my tree?**

Q&A 8/9/2016

A: It sounds like your oak has Jumping Oak Galls. These are tiny, seed-like galls that form on the undersides of Valley Oak leaves. They are caused by the tiny gall wasp, *Neuropterus saltatorius*. A tree infested with these galls will often times have leaf drop. The galls cause the upper surface of the leaf to lighten in color and form a kind of blister that is often ringed with a yellow halo. Heavily damaged leaves may curl and fall from the tree and the entire crown of the tree may be affected.

Each gall contains a single wasp larva that feeds on the inner lining of the gall. When the gall wasp larvae are mature the galls drop to the ground. The movement that you describe is the larva inside the gall moving and making the gall jump around on the ground after they have fallen from the tree.

Once the galls falls, the movement helps the larvae burrow into the ground or under leaf litter. It then overwinters inside the gall. In the spring, the females emerge and lay their eggs in newly opened leaf buds. The galls form in response to chemicals in the larva's saliva. The adult female wasp, in order to be able to create a gall that contain an egg, must sting the leaf at precisely the right time. If the leaves are too fully expanded and hardened off, the galls will not form. That is why you might see one tree with millions of these galls and yet another tree nearby might not have any. It was because the trees foliation times where somewhat different.