



Digging for Gold in a Goldenrod Gall by Alexandra Kocher

There is no “X-marks-the-spot” hint to finding the little treasures buried inside goldenrod galls, but the best treasure hunters don’t need one. Black-capped Chickadees and Downy Woodpeckers are the expert archeologists when dealing with goldenrod galls; but what are they even looking for?

On goldenrod you can often find bulb-like growths on the stem, and these growths are actually made by the Gall Fly. The fly will lay an egg inside the stem and the plant will grow around the developing larva, creating a gall. During one of the larva’s developmental stages it grows teeth, and in preparation for an escape it will chew a tunnel through the gall and stop just as it reaches the outside wall. When the larva is an adult fly and ready to escape in the spring, it can crawl through the tunnel and break through the outer door.

Finding food in the winter can be extremely tough, so Black-capped Chickadees and Downy Woodpeckers really benefit from finding a juicy morsel of protein inside a gall. Both birds will peck around the gall until they find the hollow tunnel, then they break through and dine on their find!

When looking at the remnants of the galls, you can actually distinguish between the two birds as to which one broke into the gall. Downy Woodpeckers are expert hole creators, so their excavation is clean and precise. Black-capped Chickadees on the other hand leave a mess of pecking marks, but they get the job done regardless! If you find a gall that has no pecking marks and the slightest pin-prick of a hole, then that means the Gall Fly made it through the winter and escaped in the springtime.

So next time you’re outside this winter, take a look and find the remains of a treasure excavation. Was it team chickadee or team downy who took the prize?



Downy Woodpecker excavation



Black-capped Chickadee excavation



Gall Fly escape

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