

## EUROPEAN SKIPPER

(Revision of Factsheet "European Skipper", April 1977)  
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The European skipper, a butterfly-like insect, was first discovered in North America at London, Ontario about 1910 on quackgrass in the vicinity of the city dump. It is thought that eggs of this insect were in swamp grass used to pack glassware shipped from England. Populations increased gradually and the skipper was of no economic interest until 1956 when a stand of timothy was stripped of leaves in Grey County. Since then, sporadic outbreaks have occurred in hay and pasture fields in both southern and northern Ontario.

### Recognizing the Insect and Its Habits

The adult is a pumpkin orange skipper with a wing span of  $\frac{3}{4}$  of an inch (Figure 1). The skippers are present for only about 3 weeks between mid-June and mid-July. They may be seen congregating in wet areas such as in road ditches or skipping along pastures and hay fields visiting the flowers of legumes or certain weeds for nectar (Figure 2). During this time the female lays a row of tiny, whitish, flattened oval eggs under the leaf sheath of grasses, primarily timothy and red top (Figure 3). In 2 or 3 weeks tiny caterpillars begin to move within the eggs, but the eggs do not hatch until the following spring.

In late April small greenish larvae or caterpillars emerge and feed on grass leaves until mid June when they are  $\frac{3}{4}$  of an inch long (Figure 4). They then tie themselves to grass stems or the underside of weed leaves and change to a chrysalid. The chrysalid is also green,  $\frac{3}{4}$  of an inch long with a double white strip (Figure 5). In about two weeks the skipper emerges. There is one generation per year.

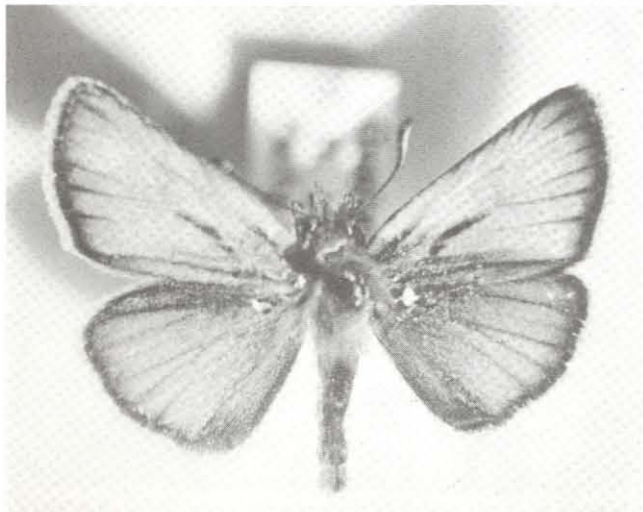


Figure 1. The adult skipper



Figure 2. Adults on thistle

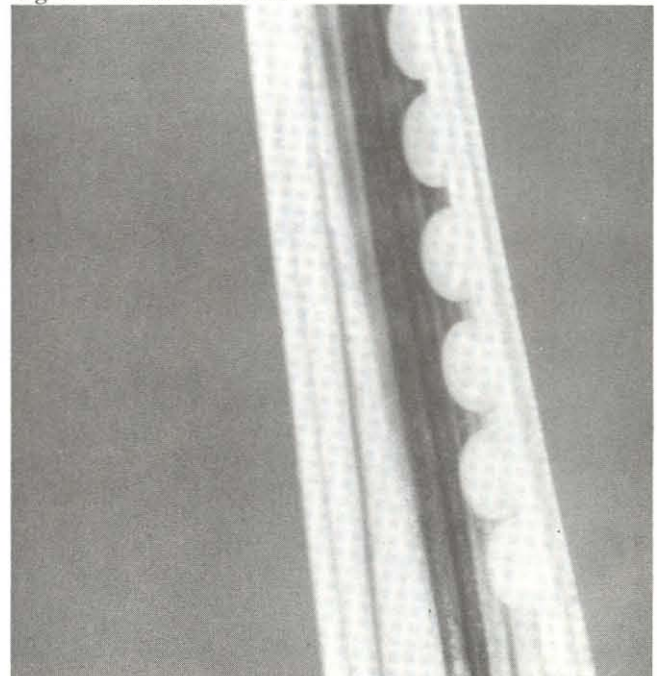


Figure 3. Eggs laid inside leaf sheath

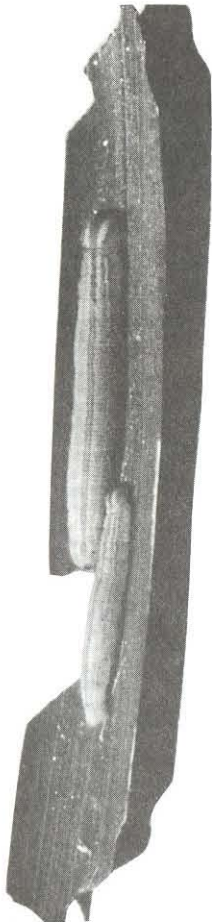


Figure 4. Half to full grown caterpillars



Figure 5. Chrysalids attached to debris

### Plant Preference

To date, the European skipper has only been a pest on grasses in pastures and hay fields. It prefers timothy but will feed on most of the common grasses in Ontario.

### Crop Damage

The larva or caterpillar is the destructive life stage of the insect. Initially, it rolls the grass leaf by bringing the edges together and fastening them with silk. This forms a protective tunnel as it feeds within from the leaf tip downward.

Damage to plants usually consists of a combination of leaf rolling, leaf gouging (Figure 6) and stripping of leaves. When the insect population is very high the caterpillars will also feed on the heads of plants (Figure 7) and leave only the stems remaining in a field (Figure 8). This results in a reduction in yield and quality of the forage. In seed production, damaged and missing leaves can result in shrunken and poorly filled seeds as well as a reduction in the number of seeds.

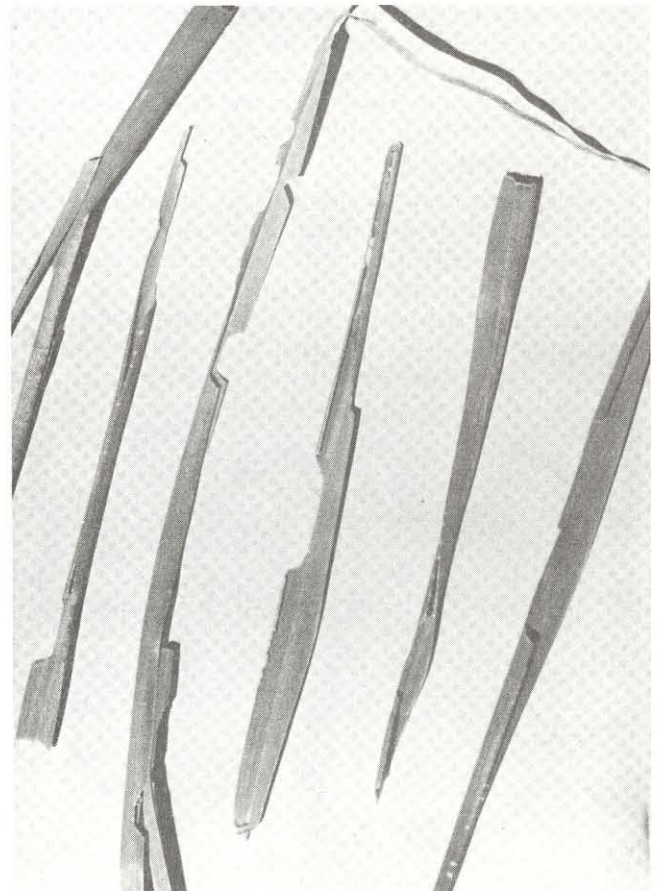


Figure 6. Leaf roll and gouging damage

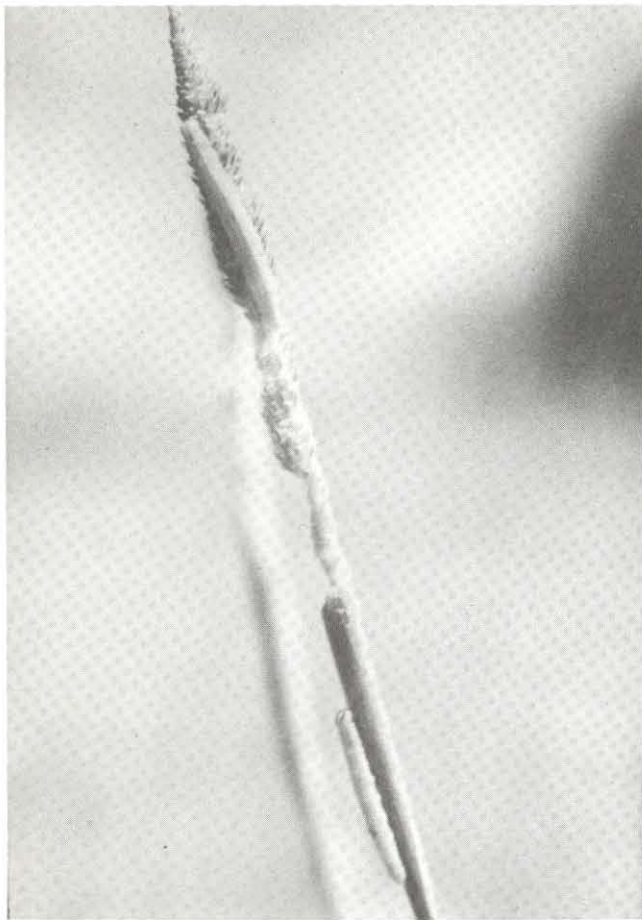


Figure 7. Caterpillars feeding on head of timothy



Figure 8. Damage to timothy seed field

### When and How to Assess a Field for Possible Damage

Fields must be checked for the caterpillars by late April or early May. Cut off a square foot of forage right down to ground level and place it along with the old crop residue into a bag. Tie the bag and leave overnight at room temperature. The caterpillars will crawl out and can be easily counted. Several square foot samples from different parts of a field better represents the field infestation.

### Economic Threshold

Initially, the small caterpillars have black heads but soon become a brown color with two light bands. If 6 to 8 caterpillars per square foot are found as early as the *brown headed stage*, treat the field or the infested area.

### Control

Use one of the following biological agents: Thuricide HPC at 1 quart per acre or Dipel (SC) at  $\frac{1}{4}$  to  $\frac{1}{2}$  pound per acre.

Note that the biological agents will not immediately kill the caterpillars, however the insect will stop feeding once it eats the product.