

Spruce Budworm

Choristoneura fumiferana (Clemens)

Lepidoptera: Tortricidae

Morris, R. F. 1955. The development of sampling techniques for forest insect defoliators, with particular reference to the spruce budworm. *Canadian Journal of Zoology* 33: 225-294.

Objective: To review the development of sampling techniques for *C. fumiferana*.

Abstract: Spruce budworm, *Choristoneura fumiferana* (Clemens), is the most destructive defoliator of balsam fir, *Abies balsamea* (L.) Mill., and white spruce, *Picea glauca* (Moench) Voss, in eastern North America. The last three larval instars cause most of the defoliation. Periodic outbreaks occur every 30 years, while epidemics can last 5-10 years.

This publication represents an exhaustive compendium of sampling techniques for *C. fumiferana* that evolved during the classic "Green River" ecological study of the population dynamics of this defoliator and its natural enemies in New Brunswick, Canada. These methods represent one of the first rigorous sampling plans refined for a defoliating forest pest and were the basis for the life table for *C. fumiferana* constructed by Morris and Miller (1954). The table of contents for the article is presented here; interested readers should review the publication for detailed information regarding the theory and mechanics of sampling forest defoliators.

Sampling Procedure

THE DEVELOPMENT OF SAMPLING TECHNIQUES FOR FOREST INSECT DEFOLIATORS, WITH PARTICULAR REFERENCE TO THE SPRUCE BUDWORM

By R. F. Morris

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Reference

Morris, R. F.; Miller, C. A. 1954. The development of life tables for the spruce budworm. *Canadian Journal of Zoology* 32: 283-301.

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