NOTES AND LETTERS

PLUME MOTHS

That 'handy' little moth shown in the September Blue Jay (p. 160) is commonly known as a plume moth (Family Pterophoridae). I am doing a two-semester undergraduate project on the Pterophoridae of Alberta under Dr. Felix Sperling at the University of Alberta. It is in the genus Hellinsia Tutt according to Gielis.3 It is a challenging group to key to species unless genitalia are dissected. It is likely one of the following three species: H. kellicottii (Fish), H. lacteodactylus (Cham.), or H. homodactylus (Wlk.) but I suspect that it is H. kellicottii based on its size and overall color.

H. kellicottii is a goldenrod (Solidago sp.) stem borer that begins its life cycle as an egg and early instar on the outside of the herb. Then in the fall, it bores into the base of the shoot and works its way down to the roots to hibernate. In the spring the larva eats its way up to the original point of entry. Once there it pupates and the adult emerges in early summer.

For anyone interested in learning more about Pterphoridae there are outdated North American guides by Fernald and Barnes and Lindsey. 1,2 The Europeans, however, have recently published a marvellous book series on the microlepidoptera of Europe. Of particular interest is Gielis's Pterophoridae of Europe.4 It is full of beautiful photographs of specimens, eggs and larvae as well as some topnotch drawings of male and female genitalia.

Also, if anyone has specimens of this family from western Canada and is



September 2000 Mystery Photo :
Plume Moth Shirley Johnston

willing to part with them I would be interested in looking at them. They can be sent to the address below and I will return the specimens.

- 1. Barnes, W. and Lindsey, A. 1921. The Pterophoridae of North America North of Mexico. *Contr. Nat. Hist. Lepidoptera North America* 4(4): 280-483.
- 2. Fernald, C. 1898. The Pterophoridae of North America. Special Bulletin, Hatch Experiment Station of Massachusetts Agricultural College.
- 3. Gielis, C. 1993. Generic revision of the Superfamily Pterophoridae (lepidoptera). Zoologische Verhandelingen. Leiden 290: 1-139.
- 4. Gielis, C. 1996. Pterophoridae. Microlepidoptera of Europe, Volume 1, Apollo Books, Stenstrup 1-222.
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59(1). March 2001 61