

FINAL REPORT

Identification and Investigation of the Immature Stages, Habitat, and Biology of *Chilostigma itascae* Wiggins (Trichoptera: Limnephilidae)

Field work for the project "Identification and Investigation of the Immature Stages and Habitat of *Chilostigma itascae*" began in June 1996. Jolanda Huisman and Margot Monson explored the type locality for *C. itascae*, the riparian wetland meadow adjacent to Nicollet Creek in Itasca State Park. In accordance with the objectives outlined in the Minnesota DNR authorization agreement, seepages draining into Nicollet Creek were identified throughout the meadow, and qualitative samples of mud, moss, and roots were taken. In addition, water temperatures were taken and coordinates were established using a GPS. Samples were preserved in the field and returned to the lab for later examination. These samples contained relatively small numbers of invertebrates, including Hirudinea, Oligochaeta, Mollusca, Ephemeroptera, Odonata, Diptera, Coleoptera, and Trichoptera. Larval Trichoptera did not include candidates for association with adult *C. itascae*.

Winter field work began in November 1996, during which time Huisman and Monson explored the frozen wetland in hopes of encountering *C. itascae* adults and the specific areas from which they emerged. In addition, mud and moss samples were obtained from one large open seepage area in the meadow. In December they repeated this process, skiing over the wetland in hopes of discovering *C. itascae* adults on snow covered surfaces, as they were originally encountered. No adults were found nor were immatures discovered in the samples. Winter field work was completed in February 1997 when Monson and assistant skied over the frozen wetland and again checked open seepage areas for *C. itascae* adults. No adults were encountered.

1997 summer field work began in June when Huisman and an assistant set out pitfall traps in major seepage areas in the wetland meadow in hopes of obtaining *C. itascae* immatures. In July pitfall traps were again checked and mud and moss samples were also taken by Huisman and Ralph Holzenthal. No immature Trichoptera were collected that were candidates for immature stages of *C. itascae*.

During the winter of 1997 poor travel conditions within Itasca State Park made access to Nicollet Creek unsafe.

Plans for future work include setting emergence traps over seepage areas that do not freeze over during the winter months in hopes of collecting *C. itascae* adults as they emerge, thereby identifying more precisely the specific habitat from which the immature stages might be collected in the future.

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**Field work for the Identification and Investigation of the Immature Stages,
Habitat, and Biology of *Chilostigma itasca* Wiggins
(Trichoptera: Limnephilidae)**

Date	Activity
18 June 1996	Huisman & Monson, identification of seepages/sampling
26 June 1996	Huisman, sampling
30 June 1996	Huisman, sampling
27 July 1996	Monson, sampling
1 September 1996	Huisman & Monson, sampling
29 September 1996	Huisman & Monson, sampling
7 November 1996	Huisman & Monson, sampling
9 December 1996	Huisman & Monson, sampling
15 February 1997	Monson & assistant, exploration/observation
26 June 1997	Huisman & assistant, set pitfall traps
2 July 1997	Huisman & assistant, empty pitfall traps
27 July 1997	Holzenthal & Huisman, sampling