

## One of the bedrock principles

of butterfly (and all) taxonomy is that each species should have a uniform identifying name that is accepted and recognized by others so that everyone can know what species is being referred to. This ideal, admirable in its directness, and simple to grasp in concept, has proved over the past 250 years to be dreadfully difficult to realize in practice.

The problems inherent in assigning each species a stable and unique name consisting of a genus name and a specific name are legion. First, consider how much our notions of what constitutes a genus and what constitutes a species have changed over the past 250 years since Linnaeus published *Systema Naturae* in 1758. (Recall that Linnaeus placed all butterflies in a single genus he called *Papilio*.) Consider how taxonomists still disagree over how broadly or narrowly to apply the fluid concepts of genus and species. Then consider what it would have required over the past two and one half centuries for someone with a specimen in front of him or her to be sure that it was a species not previously described. This would be necessary because, under the rules of priority, usually only the first published name of a species is a valid name. Any names published after the first published names are generally considered invalid. Notice I said “usually” and “generally,” because, like most rules made up by humans, there are exceptions.

But still, suppose in the late 1860s a naturalist attached to a United States government expedition out West sent back a batch of butterfly specimens to Samuel H. Scudder or William H. Edwards or any other of a number of taxonomists describing our butterfly fauna at the time. If a certain specimen looked unlike any species that the taxonomist was familiar with there would be an inclination to name it and publish the name. We can imagine, however, that

another collector may have already sent a specimen of that same species to a European taxonomist, and that its description was already published in a book or journal in Europe or that the same species may have been described and the description published by a Russian lepidopterist from specimens taken in Alaska or Siberia earlier in the century.

To be sure that the specimen belonged to a species that had never been described in a publication, Scudder or Edwards would have had to check every relevant book or scientific journal in the United States, Canada, Great Britain, Russia, France, Germany and on and on. Not surprisingly, therefore, many of our

*Opposite page: The two distinct forms of Tailed Oranges can sometimes be seen on the same day.*

*Opposite page top: Dry season form Tailed Oranges are well-marked with obvious “tails.” Oct. 15, 2003. NABA Butterfly Park, Hidalgo Co., TX.*

*Opposite page bottom: Wet season form Tailed Oranges are often almost unmarked and have much less pronounced “tails.” Oct. 20, 2003. Fronton, Starr Co., TX.*

by Harry Zirlin

