## THE IMPORTANCE OF INFORMATION ON SPECIMEN LABELS

## René Corado

Western Foundation of Vertebrate Zoology, 439 Calle San Pablo, Camarillo, California 93012 U.S.A. *E-mail*: rene@wfvz.org

La importancia de la información en las etiquetas de los especimenes.

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On 12 November 2002, I prepared a study skin of a female Short-eared Owl (Asia flammeus) (WFVZ#53988) collected near the Santa Clara River, in Santa Paula, Ventura Co., California. When I opened the stomach to check the contents, I found a complete, fresh Marsh Wren (Cistothorus palustris). I also was able to prepare the wren as a study skin (WFVZ#53987). Subsequently, I decided to review the literature on diets of Short-eared Owls to evaluate the amount of data available from stomach contents. I found that there are numerous studies of Short-eared Owl diets based on pellets, but found only one study based on stomach contents (Fisher 1893). To further asses the utility of stomach content information, I reviewed data from 234 Shorteared Owl study skins located at the Los Angeles County Museum of Natural History, The Museum of Vertebrate Zoology at the University of California, Berkeley, and the Western Foundation of Vertebrate Zoology. However, I found only 6 skins (< 3%) with stomach contents recorded on the labels.

It was surprising to me that 97% of the labels I examined were missing information as important as stomach contents. As a result,

I want to remind colleagues that it is fundamental that data be recorded as completely as possible, because specimens and their data serve as permanent records of a limited, often dwindling, resource (Foster & Cannell 1990). As my review showed, a problem with many older museum specimens is that they have little or no related data with them. In part this may be due to the original collectors not taking the time to record the data, but also because early scientists and collectors were unaware of the importance of accurate label data (Rasmussen & Prys-Jones 2003). As Green and Scharlemann (2003) emphasized, museum collections are a resource for retrospective long-term studies, and especially for monitoring and hypothesis testing. It is very important to keep in mind that proper data recording and management is perhaps the most important aspect of specimen preservation. Winker (2000) considers attached labels as the most important and most used documents for data retrieval.

A specimen does not have much scientific value if the information contained on its label is insufficient. Remsen (1995) summarized that most museum specimens have at least the

following data: a precise locality, the date of collection, and the sex. Study skins with these data can be used in studies of geographic variation and taxonomy (using both plumage and morphometric characters), seasonal and geographic distribution, zoogeography, molt, sexual dimorphism, and age/sex ratios. Specimens missing any of these basic data categories are of lesser research value. As an example, besides standard date, location, and sex information, I record the following on my bird skin labels: collector, weight, iris color (if the bird is fresh), bill and leg color, degree of molt, amount of fat, percent of skull ossification, stomach contents, gonad size, and how the bird died. More details of what information is useful on labels can be found in McCabe (1943). With all of this information available on labels, and now with many collections being computerized, the usefulness of study skins can be greatly enhanced.

Many of us know how physically and emotionally difficult it is to collect specimens in remote places like the tropics. For example, I have been working in the Neotropics since 1986. On several occasions, I have come back to a previous worksite to continue my research and surprise - the forest is gone! Around the world, forests are disappearing at alarming rates. Sometimes we have the opportunity only once in a lifetime to find and collect specimens, and so it is crucial to write down as much information as we can, because otherwise, valuable information will be lost forever. It is also worth mentioning that the more clearly written the data can be, the better this is for people trying to decipher our handwriting later!

Thus, I want to strongly encourage skin preparators to record as much information as they can on their labels and in their field notes, including stomach contents, behavioral notes, and habitat descriptions. Future researchers will thank us for our time and attention to such details, and the birds we help conserve may also be appreciative!

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