





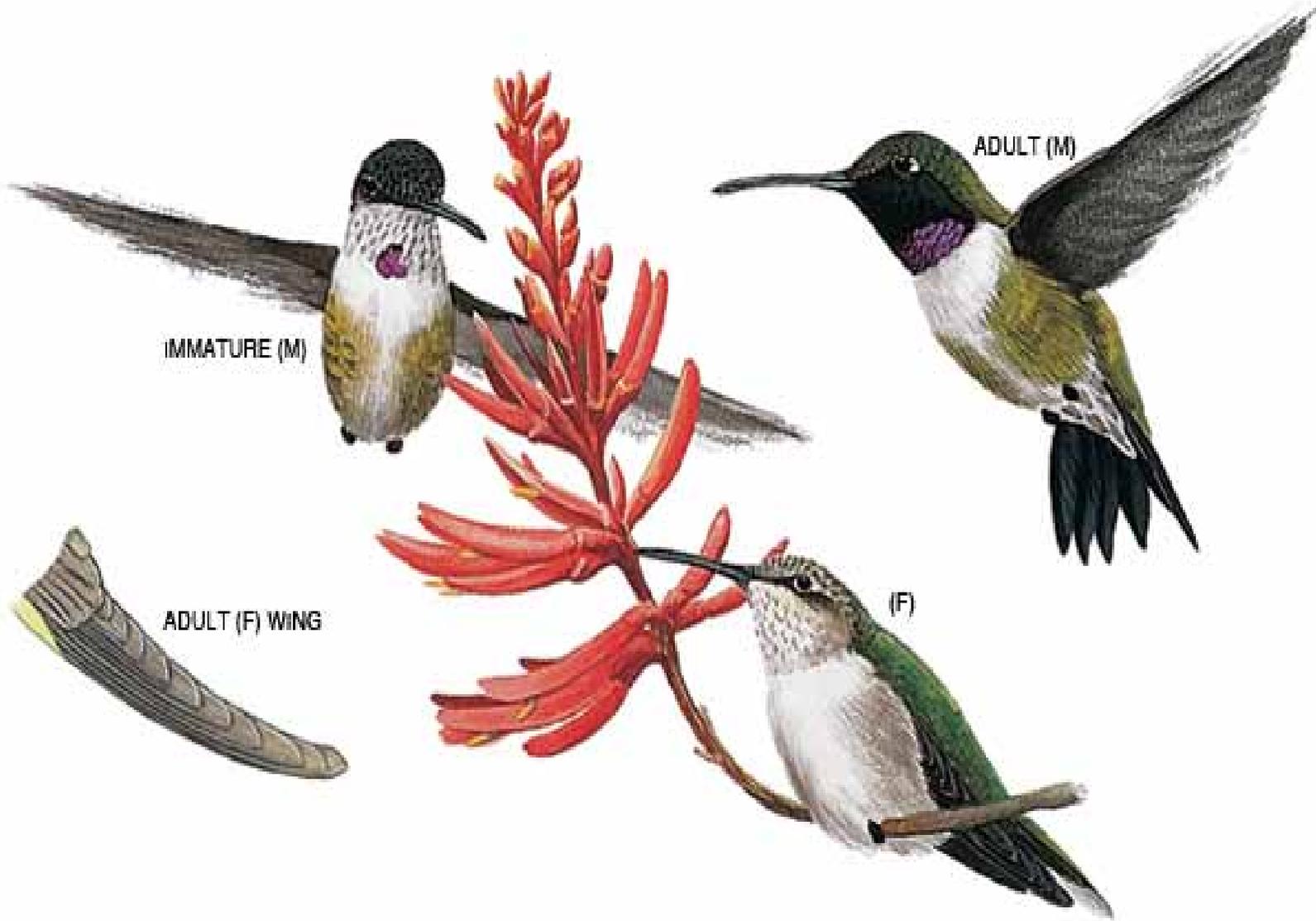
Juvenile
(Jun–Sep)



Adult







IMMATURE (M)

ADULT (M)

ADULT (F) WING

(F)

wingbeats rather stiff, pumping



gliding

Light juvenile



pale outer wing

Light adult



red tail



dark mark on leading edge

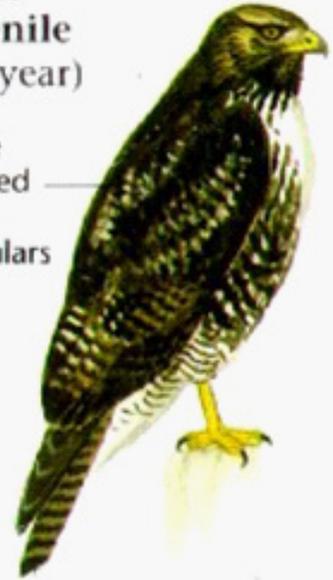


dark head

pale breast

Light juvenile (1st year)

white spotted V on scapulars



Light adult

streaked belly-band



Horizontal lines for writing.

HOW TO USE A PLANT FIELD GUIDE

SUMMARY HAND OUT

A plant field guide is a book that is designed to help the user identify plants in the field and is often intended to help users distinguish plants that may be similar in appearance, but that are not necessarily closely related. A field guide typically includes a description of the plant along with species drawings or photographs and an index. More complex and scientific field identification books include identification keys to assist with identification, but the publicly accessible field guides are a more user friendly resource. When considering a useful field guide, it is good to locate one that is specific to your bioregion if it is available. Field guides are generally organized into one of three categories, or a combination of these category types. These include organization by 1. Flower Color, 2. Plant type (Tree, Shrub, Vine, Cactus, Agave, Herbaceous plants) and 3. by Plant Family.

1. Field Guide By Flower Color



Field guides organized by flower color provide reference plates in the front of the book. These provide a quick guide to various flower colors and associated page numbers where those plants are located in the book. This a handy way for looking up plants you encounter in the field with ease. By locating the range of pages with the associated flower color, it helps narrow down the search when trying to identify a plant. One draw back to this format however is it requires that the plant you are trying to identify is in bloom, so it is most useful seasonally when plants are blossoming

2. Field Guide by Plant Type

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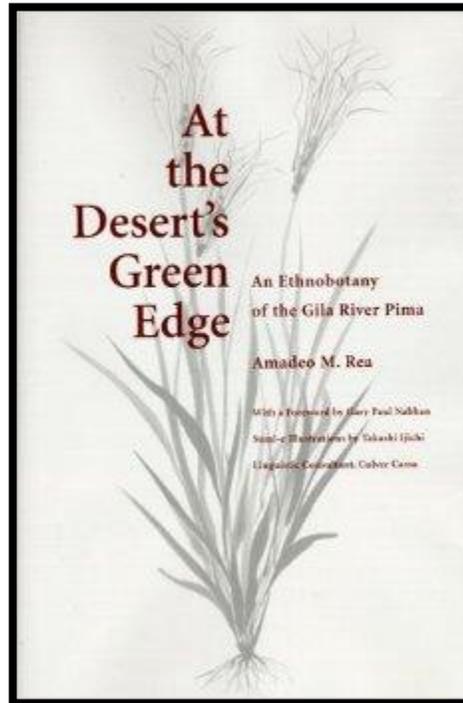
Some field guides order their chapters by plant type or category. This usually includes a section on Gymnosperms, which are cone bearing plants, followed by a section on Angiosperms which are flowering plants. The angiosperm section is usually further divided into finer categories by chapter such as Trees, Shrubs, Vines, Cacti, Agave, and Herbaceous plants (plants with with non-woody stems).

3. Field Guide By Plant Family



Field guides can also be organized into chapters by Plant Family. Plant species that are of the same Family share certain traits with one another. Organizing field guides by Family will be more useful to a user that is able to distinguish traits of many different Plant Families, helping them to narrow down the plant in question if they are able first to recognize which family it belongs to. For example plants in the mustard family can be recognized by flower pattern; they always have 4 petals, 4 sepals, and 6 stamens (two which are taller and 4 that are smaller). A phrase to help remember all plants in the mustard family is “4 petals with 6 stamens, 4 tall and 2 short.”

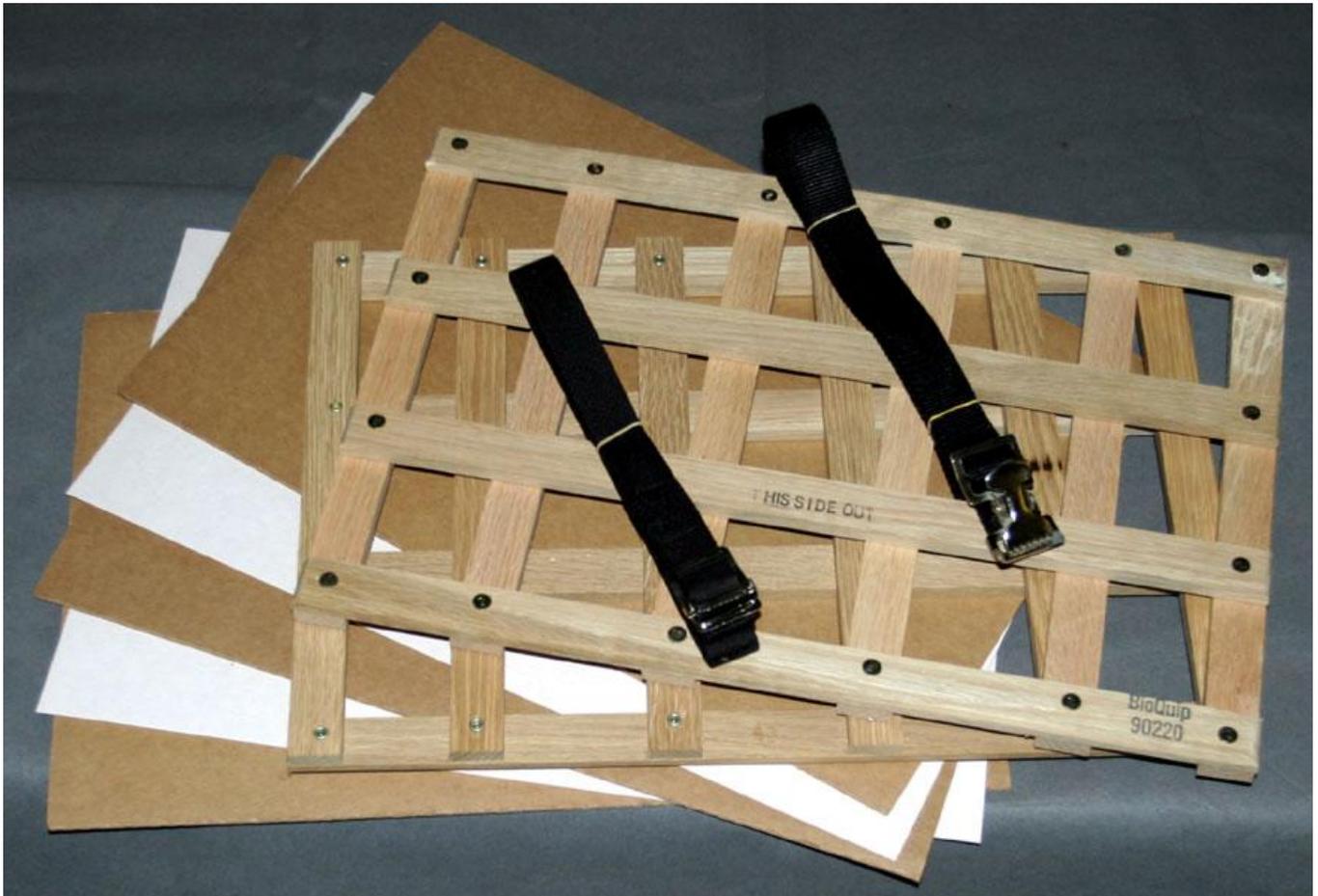
4. Field Guide By Ethnobotanical Classification



There are also field guides that are ordered according to an ethnobotanical classification system. This classification is different in that it does not follow a western scientific understanding of plants but instead uses “folk categories” as they are understood by the community itself. Each category is assigned a chapter which introduces the conceptual basis underlying the grouping as well as explaining the individual folk species that form part of the family. For example, in Amadeo Rea’s excellent work on the Ethnobotany of the Akimel O’otham he uses the native terms *U’us Chu:chim*, *Sha’i*, *I:vag* as well as covert categories (ones that do not have an explicit name) to organize the plants into different family groups. These groupings are based on a folk scientific understanding of plants that can mirror the western scientific understanding but can also be based on other criteria (e.g. cultural use) specific to the community.

PLANT PRESS GUIDE

How to Press and Preserve Plants



- 1) Buy or build a plant press. A plant press should consist of a wooden frame (for rigidity), corrugated cardboard ventilators (to allow air to flow through the press), blotter paper (to absorb moisture). The plant press is tightened using straps with buckles or bolts with wing nuts. The objective of pressing plants is to extract moisture in the shortest period of time, while preserving the morphological integrity of the plant, and to yield material that can be readily mounted on herbarium paper (an acid-free cardstock) for long-term storage.
- 2) Select your specimen. It is very important to document where you found the specimen as well as to organize your collection by number. Tag your specimen while in field and assign it a unique number. Record the number on the tag and in your field journal, along with notes about where you found it, when, and any other observations that might help with identification.
- 3) Bring the specimen back to the classroom either in a rigid container (to keep it from being crushed) or a plastic bag. A moist paper towel in the container will help prevent the plant from wilting. If you have taken a plant press along, you can proceed with the next steps right in the field.