
ACKNOWLEDGEMENTS

The production of the Arizona Rare Plant Guide was the cooperative effort of several federal, state, and tribal entities, private organizations, and individuals, as listed under the Arizona Rare Plant Guide Committee.

Funds to prepare the guide for publication were provided by a grant of \$10,000 from the National Fish and Wildlife Foundation, which matched inkind service contributions of the following non-federal agencies: The Arboretum at Flagstaff, Arizona Game and Fish Department, Arizona Native Plant Society, Desert Botanical Gardens, The Nature Conservancy, Navajo Nation, Phillips Botanical and Environmental Consulting, Southwest Botanical Research, Tohono O'odham Nation, and the University of Arizona. Inkind services of the federal agencies listed (Bureau of Land Management, Organ Pipe National Monument, U.S. Fish and Wildlife Service, and USDA Forest Service) were also provided, independent of the matching grant.

Funds for the printing of the guide were contributed by the US Bureau of Reclamation, US Fish and Wildlife Service (Section 6 funds), USDA Forest Service, Bureau of Land Management, Tom Wooten Environmental Consulting, Arizona Native Plant Society, The Nature Conservancy, Arizona-Sonora Desert Museum, Tucson Botanical Gardens, The Arboretum at Flagstaff, Desert Botanical Gardens

This work would not have been possible without the help of many people. Special thanks to the following for

assistance with research or critical review:

John Amato, Dan S. Birt, Gwen Davis, Mark Dimmitt, Richard Felger, Mark Fishbein, Miriam Fritts, Cecily Gill, Steven McLaughlin, Peggy Olwell, Donald Pinkava, Charlotte Reeder, John Reeder, Robert Schmalzel, Robert Sivinski, Liz Slauson.

assistance with scanning slides:

Sheri Morris, BLM Wyoming State Office; Warren Tisdale, The Nature Conservancy

providing illustrations:

Arizona Game and Fish Department, Brittonia, Michael Chamberland, Beth Dennis, Amy Eisenberg, Matilda Essig, Richard Felger, Reggie Fletcher, Anne Gondor, Wendy Hodgson, Philip Jenkins, Pamela Scott Lungé, Memoirs of the Torrey Botanical Club, Marion Sharp, Kay Thorne, U.S. Forest Service, U.S. Fish & Wildlife Service, and New York Botanical Gardens.



Jim Rorabaugh

A 'school' of pholisma sonoreae in the dunes of southwest Arizona.

use of slides and photographs:

John Anderson, Arizona Game and Fish Department, Scott Bailey, Marc Baker, Robert L. A. Bellsey, C. David Bertelsen, Nancy J. Brian, Angela Brooks, Bureau of Land Management, Mary Butterworth, Ronald Coleman, Karen Dave, Mima Falk, Reggie Fletcher, Jefford Francisco, Ben Franklin, Dan Godec, Dave Gori, Mark Haberstick, S. Henry, Bill Hevron, Wendy Hodgson, Lee Hughes, Philip Jenkins, Juanita Ladyman, Joyce Maschinski, Navajo Natural Heritage Program, Bruce Palmer, Arthur M. Phillips, III, Barbara G. Phillips, Dallas Porter, E. Powell, Theresa Prendusi, Frank Reichenbacher, Kathleen Rice, Glenn Rink, Tricia Roller, James Rorabaugh, Daniela Roth, Sue Rutman, Sabra Schwartz, Antoinette Segade, Robert Sivinski, Dale Turner, U.S. Forest Service, U.S. Fish & Wildlife Service, Bob Vahle, Kathy Warren, Peter Warren, and G. Yatskievych

locator maps for all featured species:

Dan Godec and Sabra Schwartz of the Arizona Game and Fish Department.

We thank all the members of the Arizona Rare Plant Committee, especially Mima Falk, who initiated the grant and committee process, and who filled in wherever an unmet need arose; and to David Bertelsen for an additional 80 hours in the honing of the glossary.

Illustrations by artist:

Michael Chamberland: *Agave murpheyi*, *Agave parviflora* ssp. *parviflora*, *Pholisma arenarium*, *Pholisma sonorae*

Beth Dennis: *Abutilon thurberi*, *Arabis tricornuta*, *Astragalus cremnophylax* var. *hevronii*, *Astragalus cremnophylax* var. *myriorrhaphis*, *Astragalus newberryi* var. *aquarii*, *Berberis harrisoniana*, *Camissonia specuicola* ssp. *specuicola*, *Castilleja kaibabensis*, *Cirsium parryi* ssp. *mogollonicum*, *Cirsium wrightii*, *Erigeron anchana*, *Erigeron piscaticus*, *Eriogonum ericifolium* var. *ericifolium*, *Euphorbia platysperma*, *Hieracium rusbyi*, *Lesquerella kaibabensis*, *Pediocactus paradei*, *Psoralea arborescens* var. *pubescens*, *Trifolium neurophyllum*

Amy Eisenberg: *Asplenium dalhousiae*, *Astragalus cobrensis* var. *maguirei*, *Astragalus hypoxylus*, *Carex spiss* var. *ultra*, *Coryphantha recurvata*, *Coursetia glabella*, *Croton wigginsii*, *Echinomastus erectocentrus* var. *erectocentrus*, *Gentiana wislizeni*, *Hieracium pringlei*, *Malaxis porphyrea*, *Muhlenbergia dubioides*, *Muhlenbergia xerophila*, *Panicum mohavense*

Matilda Essig: *Astragalus sophoroides*, *Astragalus toanus* var. *scidulus*, *Cryptantha ganderi*, *Eriogonum viscidulum*, *Hexalectris warnockii*, *Lotus mearnsii* var. *equisolensis*, *Lupinus huachucae*, *Penstemon petiolatus*, *Perityle ajoensis*, *Phacelia parishii*, *Platanthera zothecina*, *Sclerocactus sileri*, *Senecio quarens*, *Stellaria porsildii*, *Talinum humile*, *Tricardia watsonii*, *Vauquelinia californica* ssp. *sonorensis*

Anne Gondor: *Abutilon parishii*, *Astragalus nutriosensis*, *Castilleja mogollonica*, *Clematis hirsutissima* var. *hirsutissima*, *Heterotheca rutteri*, *Lilaeopsis schaffneriana* var. *recurva*, *Penstemon albomarginatus*, *Purshia subintegra*, *Salvia amissa*, *Salvia dorrii* ssp. *mearnsii*, *Spiranthes delitescens*

Wendy Hodgson: *Agave delamateri*, *Agave schottii* var. *treleasei*, *Agave* sp. *nova*, *Amoreuxia gonzalezii*, *Rhus kearneyi* ssp. *kearneyi*

Phil Jenkins: *Browallia eludens*

Pamela Lungé: *Astragalus cremnophylax* var. *cremnophylax*, *Carex specuicola*, *Echinocereus triglochidiatus* var. *arizonicus*, *Echinomastus erectocentrus* var. *acuñensis*, *Flaveria mcdougallii*, *Graptopetalum bartramii*, *Laennecia eriophylla*, *Pediocactus peeblesianus* var. *fickeiseniae*, *Perityle cochisensis*, *Rosa stellata* ssp. *abyssa*

Marion Sharp: *Agave x arizonica*, *Amsonia grandiflora*, *Amsonia kearneyana*, *Arctomecon californica*, *Aster potosinus*, *Astragalus beathii*, *Astragalus xiphoides*, *Camissonia exilis*, *Cimicifuga arizonica*, *Coryphantha robbinsiorum*, *Coryphantha scheeri* var. *robustispina*, *Dalea tentaculoides*, *Echinocactus horizonthalonius* var. *nicholii*, *Erigeron kuschei*, *Erigeron lemmonii*, *Eriogonum apache*, *Eriogonum mortonianum*, *Eriogonum ripleyi*, *Eriogonum thompsonae* var. *atwoodii*, *Errazurizella rotundata*, *Hedeoma diffusum*, *Lilium parryi*, *Macropitium supinum*, *Manihot davisiae*, *Metastelma mexicanum*, *Pectis imberbis*, *Pediocactus bradyi*, *Pediocactus peeblesianus* var. *peeblesianus*, *Pediocactus sileri*, *Penstemon discolor*, *Perityle saxicola*, *Phacelia welshii*, *Phlox cluteana*, *Puccinellia parishii*, *Rumex orthoneurus*, *Salix arizonica*, *Senecio franciscanus*, *Senecio huachucae*, *Silene rectiramea*, *Stephanomeria schottii*, *Townsendia smithii*, *Triteleopsis palmeri*, *Tumamoca mcdougallii*

Richard Spellenberg: *Cleome multicaulis*, *Erigeron rhizomatus*

Kaye Thorne: *Asclepias welshii*, *Astragalus holmgreniorum*, *Cirsium virginensis*, *Cycladenia humilis* var. *jonesii*

The remaining illustrations (*Allium gooddingii*, *Amsonia peeblesii*, *Choisya mollis*, *Euphorbia aaron-rossii*, *Talinum validulum*) are without artist identification. All of these are in the public domain.

Cycladenia humilis var. *jonesii* illustration is reprinted by permission from Intermountain Flora, Volume 4, page 45. a. Cronquist, A.H. Holmgren, N.H. Holmgren, J.L. Reveal, and P. K. Holmgren, Copyright 1984, The New York Botanical Society. *Errazurizella Rotundata* illustration is reproduced with permission from Intermountain Flora, copyright 1989, The New York Botanical Gardens. Illustrations of *Erigeron sivistskii* and *Erigeron rhizomatus* are reproduced with permission of the New Mexico Forestry Division.