

A TRIBUTE TO THE AMATEUR IN BOTANY

by Herbert G. Baker Professor of Botany University of California at Berkeley

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Note: If we define a professional botanist as a trained person employed in an educational or research institution, then there are several sorts of amateurs in botany. There are those whose background consists of formal training in botany but who are working in other fields, and there are those whose botanical knowledge is largely self-gathered. There are those of independent means who expend their energies in botanical research, and others who must work for a living and yet use all of their free time for botany. In both economic groups there are qualified people interested in occasional forays into the realm of botanical investigation.

All of these types of amateurs have provided significant contributions—contributions that sometimes have been overlooked in our society's orientation toward the value of affiliation with institutions, and the value of work that is compensated by money. We wish to encourage all amateurs to continue or initiate their work (Editor, UW Arboretum Bulletin).

Although I have been a professional botanist for forty years, I feel very much more in tune with the amateur botanist than you might expect. I have a personal reason to believe that amateurs do good science because I myself had only two years of formal college education—and did my PhD research without a major professor—in the London University system that allows so-called "External Degrees" to be earned while one is working full-time in unrelated employment. Also, thanks to World War II and the subsequent hard times in Britain, my

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wife and I grew up as researchers in an environment where expensive equipment was out of the question. Consequently, we have always tried to keep the equipment necessary for our research as simple as possible, and to be economical as we can be in operating expenses.

On this basis, we believe that amateurs could contribute much more to plant science than they do at present. And we feel that they only need encouragement. In some respects, amateurs are hardly less well-placed to do research than professionals.

In academia, administrative work and innumerable committees take up much of the so-called "research time," and professionals stay productive only to the extent that they work evenings and weekends, and take vacations in botanically-determined places. Thus, in reality, the amateur has almost as much time available for research as the professional.

Here I see a big difference between the Botanical Society of America (to which I have belonged for 23 years) and the Botanical Society of the British Isles. This is not just a matter of numbers of members. The two societies have about equal numbers of members (between two and three thousand) even though the population of the British Isles is only about a quarter of that of the USA. The difference is that the Botanical Society of America is almost entirely made up of professionals, in institutions, whereas the Botanical Society of the British Isles is an amalgam of professionals and amateurs who are often very competent. I will return to this matter of membership in botanical societies later.

But how did this apparently greater emphasis on amateur botany in the United Kingdom come about? Perhaps we can get some insight by looking at the historical features of British botany.

In Britain, the 18th and 19th centuries were formative times. While botany was becoming established as a science in Europe, there were few professional botanists except for apothecaries, who produced their own supply of properly identified drug plants. Other botanists were amateurs, in the

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sense that they were not paid for work with plants. Some were independently wealthy, such as Sir Joseph Banks, whose influence was felt widely in the 18th and 19th centuries. His dedication to botany was such that he could never be considered a dilettante. Banks was the self-sponsored leader of a botanical team on Captain James Cook's first voyage to the South Seas, in HMS Endeavour. This voyage, from 1768 to 1771, was of enormous scientific and geo-political importance. Sir Joseph Banks was a great figure in British botany for many years afterwards. Since he was the fortunate possessor of great wealth and excellent political contacts, in addition to his own botanizing, he provided financial and organizational assistance for many other collectors in their overseas activities.

He was President of the Royal Society for many years and his herbarium and library were presented to the British Museum, where they served as part of the foundation of its comprehensive collections. For a while Banks was Honorary Director of the Royal Botanic Gardens at Kew-when they

were literally Royal Gardens. The Australian genus Banksia is named after him. He also travelled to Iceland and to Newfoundland (but I'm sure the Newfoundland Banks were not named after him).

Charles Darwin was a man in independent means-at least after the voyage of the Beagle, but few other persons have had such an impact on biology-evolution, breeding systems, pollination biology, plant physiology, the study of insectivorous plants and much more. Except for his thinking about the early stages of evolution by natural selection, all his ideas were worked on during the years he spent at home in Down House, in Kent. With his shyness and his illness, he could never have survived in the rat-race which we suffer today in the academic world.

Darwin succeeded as a scientist partially because he had money enough to publish. This can prove to be a hurdle not easily overcome by the amateur botanist-particularly in these days of high publishing costs.

Many of the other 18th and 19th century botanists were

The Newsletter is published six times per year by the New Mexico Native Plant Society. The Society is composed of professional and amateur botanists and others with an interest in the flora of New Mexico. Articles from the Newsletter may be re-

printed if fully cited to author and attributed to the Newsletter.

Membership in the Native Plant Society of New Mexico is open to anyone supporting our goals. We are dedicated to promoting a greater appreciation of native plants and their environment, and to the preservation of endangered species. Members benefit

Tim McKimmie

Rick Castetter

from chapter meetings, field trips, publications, plant and seed exchanges and a wide selection of books available at discount.

We encourage the use of suitable native plants in landscaping to preserve the state's unique character and as a water conservation measure.

We maintain a register of business and professional people who are members and can supply information and services related to native plants. To be added to this roster or to request information, contact the Membership Secretary.

Advertising Schedule Approved advertisements will cost \$40

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Schedule of Membership Fees

Dues are \$10.00 annually for individuals or families. "Friends of the Society" include organizations, businesses, and individuals, whose dues of \$25.00 or more provide support for long range goals. To join us, send your dues to Membership Secretary, 443 Live Oak Loop, NE, Albuquerque, NM 87122

Newsletter Contributions Please direct all contributions for the newsletter to Tim McKimmie, editor. Deadline for the next newsletter is August 5.

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professionals, although not professionals in botany. For them, botany was, at least at first, a relief from the stresses of daily work. However, in this connection it should be noted that these people were mostly in professions that left ample time for the indulgence of their hobby. Often they were country doctors or members of the clergy who traveled frequently along country roads and paths. They could, and did, appreciate floristics, phenology, and the more obvious aspects of pollination biology.

An outstanding example of the country doctor in Britain is Charles Darwin's grandfather, Erasmus Darwin, who, among other accomplishments, was a very competent doctor, a philosopher, an agriculturalist, a pioneer conservationist, and a political reformer. He is well-remembered for his biologicillyinspired poetry, and for his two large books <u>Phytologia</u> and <u>Zoonomia</u>. Erasmus Darwin had more philosophical influence on his grandson than Charles was originally willing to admit, even though some of his ideas, expressed in <u>Phytologia</u>, in which he treats plants as degenerate animals, now seem quaint.

Slightly earlier, in 1776, another country doctor, William Withering, wrote a popular manual called <u>The Botanical</u> <u>Arrangement of the Vegetables in Great Britain</u>. Despite its title, this was the first manual of wildflowers to be written in English. Though we remember Withering particularly as the discoverer of the heart-stimulating power of an extract of foxglove (*Digitalis purpurea*), his now largely forgotten book ran through many editions and had a strong public influence. A later variant on the country doctor type was the naval surgeon. Henry B. Guppy was surgeon on HMS Lark, when he first made significant observations on the dispersal of plants in the West Indies and in the Pacific Ocean. Naturally, he gave closest attention to dispersal by the sea itself.

The author and philanthropist Priscilla Bell Wakefield wrote a textbook entitled <u>Introduction to Botany in a series of</u> <u>Family Letters with Illustrative Engravings</u>, which was first published in 1796. The letters in the book are between one sister at home in the country, and another away visiting an aunt. Seasonal changes in the flora, plant structure, and the details of the Linnaean classes fare discussed. This was a popular book for the education of young ladies, and was printed in eleven editions, the last in 1841. Wakefield felt strongly that botany was a healthy and wholesome activity and hoped that her book would "cultivate a taste in young persons for the study of nature, which is the most familiar means of introducing suitable ideas of the attributes of the Divine Being by examplifying them in the order and harmony of the visible creation."

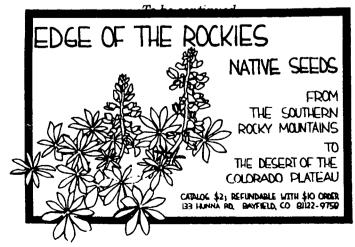
Country parsons contributed nobly to British botany. This was to be expected because, in Nature, they could see the handiwork of God. J.C. Loudon, in the early years of the 19th century, wrote in the <u>Magazine of Natural History</u> that he published: "The naturalist is abroad in the fields, investigating the habits and searching out the habitats of birds, insects or plants, not only invigorating his health but affording him ample opportunity for frequent intercourse with his parishioners. In this way the clergyman at last becomes an advisor and friend, as well as a spiritual teacher."

In Britain, it is notable that the country clergymen included the Reverend Miles J. Berkeley, who is said to have personally named over 6,000 species of fungi, making him Britain's leading 19th century mycologist. However, the contributions of most of the clergymen were to the production of local floras of vascular plants and bryophytes.

Most plant collectors who have been responsible for introducing exotic species to horticulture have been professionals, but there have been some amateurs who were in foreign lands primarily for some other purpose. These have included religious missionaries, such as the Reverend William Colenso, who in 1834 went out from England to the colony of New Zealand. There he collected and described species of plants for 65 years, giving special attention to those of the mountainous regions. He was elected, prenumably in absentia, to Fellowship in the Royal Society (of London), and Sir Joseph Hooker dedicated one volume of the Flora of New Zealand to him. Less completely in the country, lawyers have made their contribution. Probably the most famous of these in the 19th century was George Bentham, a taxonomist and flora composer whom we most readily think of as part of the team of Bentham and Hooker. This team represents the perfect example of the ability of an amateur and a professional to work together in harmony -which they did at Kew Bentham was the compiler of the floras of Hong Kong and of Australia, as well as a contributor to many others, and he wrote a British Flora, which was subsequently revised by Hooker. The greatest work of this team was the production of Genera Plantarum—a conspectus of the world's flora at the generic level, and a new systematic arrangement of the families of plants.

Among the statesmen who were botanists, one man stands out—Sir John Lubbock, later Lord Avebury. A neighbour of Charles Darwin, he was, among other accomplishments, a banker, a member of Parliament, a Privy Councillor, an essayist, an archaeologist, and an entomologist—as well as a botanist. Between 1870 and 1905 he wrote more on these subjects than anyone, and became renowned as an expositor of biology for the amateur. His rewards were elevation to the peerage, many honorary degrees, and election to scholarly societies.

Anne Pratt wrote several instructional books for younger readers. <u>The Pictorial Catechism of Botany</u> was published in London as early as 1842. In it, the structure of the flower is described and the necessity of pollen for seed-setting is stated although the details of pollination and fertilization are omitted.



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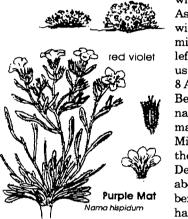
GILA

25 June, 7:00 pm, Carter House - Jack Carter will speak on local shrubs, small trees. . . .

30 July 7:00 pm, Carter House - Bob Schloss of the U.S. Forest Service will speak on "Landscaping in the Southwest." Anita Morton will share her experiences of landscaping with natives. 27 August 7:00 pm, Carter House - Hiram Parent will present a slide show, "Color in the Wild."

OTERO

25 July 10:00 am, Holcomb Ranch in Monument Canyon - Meet



with lunch at the Timberon Lodge. As you come into Timberon you will see the Fire Station, Swimming Pool, and the lodge to your left. The Medeiros family will guide us around.

8 August 11:00 am, Home of Jim & Betty Claypool of Bent - Edible native potluck. Go to Hwy 70 mile marker 240.5 and look for mailbox. Mile marker 240 is the church on the hill across from the Bent Fire Dept. You can start thinking now about what to bring using nuts, berries, greens, etc. Nancy Hutto has a good selection of books on Allium Wild onion



plains

edible native plants as does the Alamogordo Public Library. After potluck explore surrounding area including Nogal Canyon.

13-15 August - Otero County Fair. Need lots of help.

28 August 7:30 pm, Tularosa Elementary School - "Penstemons" by Bill & Jean Heflin

29 August 9:00 am, Cloudcroft Skating Rink (next to Buckhorn Cabins) - Penstemon field trip.

ALBUQUERQUE

22-23 August 10:00 am to 4:00 pm, Albuquerque Garden Center - Plant Sale.

LAS CRUCES

8 July 7:30 pm, Ag Building, Rm 190 - "Practical Uses of Medicinal Herbs" by Paul Harmon.

12 July 7:00 am, Pan Am Center -Field trip to Hillsboro box and Nutt Road.

12 August 7:30 pm, Ag Building, Rm 190 - Lisa Johnson, New Mexico Native Plant Society Book Coordinator.

16 August 7:00 am, Pan Am Center - Field trip to Sunspot, Bluff Springs and old growth forest.



Don't Uproot the Natives: Buy propagated plants

by David K. Northington ,Executive Director of the National Wildfloer Research Center.

Reprinted from Wildflower, Volume 9, Number 2 1992

In our enthusiasm to incorporate local native plants into our planned landscapes, we need to keep in mind one of the most important reasons for their use. Beyond the aesthetic considerations of color, texture, and seasonal change—and beyond the economic savings from reduced watering, fertilizing, and maintenance costs—we incorporate indigenous natives into our landscaped areas to increase the number of native plants in our world. Past practice has been to remove native plants when developing land for human use and replace them, for aesthetic reasons only, with introduced exotics. In the future, we must reestablish those same native species that were removed.

To realize a net gain of native plants in our world, we must ensure that we plant only propagated and nursery grown individuals. Except for valid rescue digging, removing a plant from the wild to transplant to planned landscapes results in a net loss of native plants because a certain percentage of those plants will not successfully transplant and will die. But even if 100 percent of all plants dug from the wild could be transplanted successfully, doing so still would be wrong because their removal contributes to ecological imbalance in the community from which they were removed. Relocating these plants is all that is happening.

We can enjoy positive results from using indigenous native

species in our home, school, and business landscapes, as well as parks, roadsides, and other planned areas. Use plants that have been propagated from seeds that were properly collected from the wild, or from cuttings grown in containers to the desired size.

Some of the issues concerning the cultivation of native plants and the use of those dug from the wild revolve around semantics. If asked—and one should always ask—most nurseries will clarify whether a plant is propagated or dug; however, the terms "containerized" and "container-grown" sometimes are applied to plants that have been dug from the wild and then put into a container for sale or for growing larger before sale. The implication of course is that these plants were propagated and then container-grown—clearly misleading terminology!

Conversely, not all plants that are balled in burlap are dug from the wild, although most are. A few nurseries have planted propagated shrub and tree seedlings in a tree farm to be watered and fertilized for maximum growth into specimensized individuals, then they dig them and wrap the root ball in burlap or box it for transport.

The key issue is our desire to add to the number of native plants, not further reduce or even relocate those plants. Only using propagated plants will accomplish this. Be aware of the terms often used, understand what they may really mean, and ask the important questions.



CHAPTER REPORTS

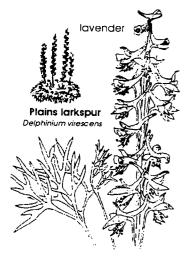
Otero-Jean Dodd

Dee Umberson invited those of us who could go on a trip in the middle of the week to go with him to some of his favorite places in the Jarilla Mountains. April 15th turned out to be ideal. Cacti and yuccas were in bloom as well as *Dalea formosa*, Apache Plume and lots of wildflowers.

We found out that when chocolate flowers grow in a small ditch, their smell is accented-very nice! Cactus were interspersed with drifts of *Allium macropetalum*, an upright onion with streaks of pink to lavender on white blossoms.

one field had unusually tall white Spectacle Pod and yellow western wallflowers, like a small forest. "Grandma, the flowers are taller than I am"-this from a 9 year old. Pink blossoms on the Desert Holly, *Perezia wrighti* i and the *Coldenia canescens* were new to some of us. If there is such a thing, the Otero trip to the UTEP Reseach Ranch on April 25th was difinitely four star quality. Whether you reached Van Horn from I-10 or went past the Guadalupes, there were floweres galore. Patches of deep blue were the dainty *Verbena perennis*, Warnock-Davis p. 191, the little pinkish-purple Nama hispidum

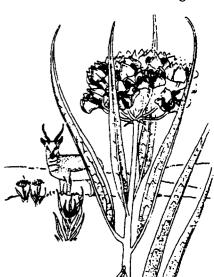
p. 183 Warnock-Davis, and the beautiful shrub Range Ratany, *Krameria parivifolia*, with small leaves and stems and wine colored blossoms. We saw a purple ground cherry-*Physalis lobata*-in the middle of a wash on the ranch and again in a cack in the sidewalk in Hope, N.M. Faxon yuccas with their fluffy, edible flowers were in both Van Horn and on the ranch. A new to us Twist Flower was *Eruca sativa*. We have beenseeing regularly on trips the coldenisas. They were on the ranch only with more different kinds-canescens, gregii, and hispidissima-all ground hugging woody shrubs. The



Many thanks to Robert Dewitt Ivey for permission to use his wonderful drawings from *Flowering Plants* of New Mexico, second edition, in our newsletter

BERNARDO BEACH NATIVE PLANT FARM DESIGN & CONSULTATION DROUGHT TOLERANT & NATIVE LANDSCAPE ORNAMENTALS 520 MONTAÑO NW, Albuquerque Mon - Sat 9 - 6 505-345-6248 Resurrection plant, Selaginella lepidophylla-Warnock-Davis p.55, was new to some. It looks like a dried up clump until water is added. It greens up and comes to life.

Our thanks to the Bristols and Wynn Anderson for inviting us and making arrangements. We were furnished with a list of the Flora of the Indio Mountains. Wynn spent the day showing us some of the enormous quantity of flowering plants, talked of the rock formations, explained how the ranch was acquired-gift from Mr. Cotton, the research uses



Antelope horns milkweed Asclepias asperula

for a variety of classes from several universities, and gave us the opportunity to enjoy the grand vistas of the near mountains clear down into Mexico.

Las Cruces-Paul & Betty Shelford

The Las Cruces Chapter received a handsome plaque from the Bureau of Land Management with the following text: "In recognition of service to the public for rare plant surveys, La Cueva Nature Trail Guide, and A. B. Cox Visitor Center native plant garden."

Dr. Reldon Beck, Professor of Range Managment in the NMSU Range Science Department, spent five months in New South Wales, Australia at the invitation of their Range Management Department. At our May meeting, Dr. Beck presented a program of slides depicting many of the unique aspects of Australian native plants, trees and grasses.

The great winter/spring rains on May 17 helped present one of the most productive field trips in years. We saw 69 species of plants in flower in our own backyard, the Dripping Springs area of the Organ Mountains and their foothills. Among plants spotted were blue trumpets, Chihuahua flax, snapdragon vine, yellow salsify, spider antelope horns, scarlet gaura and plains delphinium.



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Journey Through Regeneration: A Personal Experience with Nature

by Ken Ingle

Reprinted from Wildflower Magazine, Volume 8, Issue 1

Nature wields a powerful force for regeneration when given a chance. This was most dramatically demonstrated to me a few years ago on a return visit to my parent's farm after an absence of nearly two decades.

As a boy from a British slum, my father had immigrated to Canada at 17 to work on farm.s in the Ottawa Valley. Although he eventually became an industrial worker, he never lost a deep love of the land that the experience of farming had given him.

Thus, when doctors suggested that I might be healthier living in the country, an oftdiscussed possibility in our family was finally turned into a reality. At 17, I, too, began a new life on a farm in northern Ontario.

We had moved in the fall and, after a hard

winter in a house with no central heating or indoor plumbing, I was more than ready by spring to start discovering some of the more positive aspects of country life. The farm was not to fail me.

It's zoned as rural, rather than agricultural land, and it really wasn't a farm in terms of crop production or grazing land. A quarter mile wide by half a mile deep, it was fronted by a large field containing the house. Behind was a gully and then abandoned fields and woods including a bog. The eastern boundary was composed of a creek set in a wooded valley.

Such was what I found as I explored our property that first spring. Under trees along the gully, I first encountered violets in vivid shades of yellow, mauve and purple. There were tiny white ones, too, with a perfume so pure that you just had to take a few home — if you could find any with stems long enough to pick.

An abandoned field just starting to go back to brush was a carpet of pink-striped white spring beauties (May flowers as we call them) and a boggy patch beside the creek was brilliant with yellow marsh marigolds.

I had lived in only a partly urbanized area in town and so was not new to exploring woods. But this seemed much more beautiful — not least because I could view it as a personal paradise.

However, it was a pauper's paradise nonetheless. We had purchased the property from a man referred to as a "dealer" and he had literally stripped everything saleable from the



land that he could. The woods were scrub white and black spruce and there were a few dying white birches around the bog. In an area famed for its fall display of maples, our woods offered only one forlorn, modest specimen in orange and gold. It got even worse. One portion of the property had been reduced to raw, subsurface clay where the top growth had been bulldozed into a pile and the topsoil sold off. Little grew on the site and it was a trap to the feet when wet. It was a clear case of rape and it had left a brutally ugly scar.

This, then, was the lessened wild garden that I left behind in my early twenties to pursue a career across the country as a reporter. As an environmental writer approaching middle age, I came back for a visit, not knowing quite what to expect. It was a dynamically positive lesson in natural regeneration. The violets were still there but the field of spring beauties was now a virtually impenetrable thicket of scrub brush in which young birches, maples and mountain ashes were rapidly pushing up. In what had been a field in the back, bordering white spruces had busily sown seeds and added considerable new acreage.

Additionally, there were so many plants that I had never seen before. In the detritus under maturing black spruces, I found a pair of delicate, waxy white Indian pipes. In another area the ground under the trees was thick with the pale yellow, lily-like blooms of clintonia. And in an old patch of previously known ground pine, a second variety ran as a vine along the earth, sending out a multitude of side shoots.

Near the western boundary of the property by a sideroad, clumps of shrubby sheep laurel, a Canadian cousin of the mountain laurel, were aglow in a blanket of soft pink. Where they had come from is a mystery since we live in dairy country and sheep laurel is considered poisonous to livestock and is usually rooted out. But many of the farms, including ours, are no longer worked and nature is coming back.

It was at the site of the "rape" that the true miracle had been wrought. The gash across the land was gone. The bulldozed lump along the side had weathered down and the whole site was covered with grass and alive with wildflowers.

Here, also, there were lots of new trees. Many years before, a farmer across the road had planted some young white pines along the front of his property and now the huge old trees had shared the bounty of their seed and helped to heal the scars of an ugly act. The young white pines were four and more feet tall. And they were healthy — strong, bushy and thriving amid the reborn plant life that now covered the clay.

Such was my lesson in natural regeneration — and natural moralty. The laws of nature had been completely oblivious to the degradations of my species. They simply went on functioning, working through the opportunity of unused farmland to restore the diversity of life with all the checks and balances that make possible the long-term, positive process of evolution.

As I looked at this re-enriched wilderness, I couldn't help but see the possibilities for us, as creatures of multiple choice, if only we would learn to copy rather than continually attempt to conquer. Natural process has much to teach us. We have much to learn.



Small Desert Shrub Supplies Cool Season Color

by J. Joseph Pearl

Reprinted from Southwest Lawn & Landscape, March 1992

One of the most commonly-seen shrubs in the deserts and lower mountain ranges of the Southwest is the Turpentine bush. *Haplopappus laricifolius* was previously known as Erlcamera *laricifolius* and may still be found in reference books under this name. In more recently updated books or new desert plant Identification books, look under the genus of *Haplopappus spp*.

There are over 150 species of the *Haplopappus*, and many of those can be found throughout the Southwest and Mexico. This diverse plant can be seen growing at sea level (*H. pinifolius*, Pinbush) and at elevations of up to 6, 000 feet (*H. laricifolius*). *Haplopappus* species are seen commonly below the Mogollon rim in Arizona. One particular species. Wedgeleaf goldenweed. has been seen as high as 7,000 feet above sea level. Whether the plants are growing at 1,000 or 6,000 feet, they are truly drought tolerant.

The Turpentine bush is a flat-topped shrub with dark green foliage approximately one to two centimeters in both length and width. The leaves give off an odor similar to turpentine when crushed.

Actual size of this shrub varies greatly depending on where it is growing in the wild. ranging from one to three and a half feet in



height. Naturally a Turpentine bush growing in a rocky crevice will be quite smaller than one growing in an alluvial fan.

The flowers of the Turpentine bush are yellow and shaped like small pom-poms. As the flowers get older on the plant they begin to lose their bright yellow color, turning off-white and finally drying up and falling off the plant. The blooms occur in the winter months in Southern Arizona, usually around November.

Other Haplopappus species grow rampant in

livestock grazing areas. H. tenuisectus (Burro weed) and H (Jimmyweed) are two of these culprits. Both of these plants have the capability of taking over an entire grazing area, and both are difficult to eradicate. While neither are favorites of livestock, during drought situations the cattle will eat them. Burro weed will cause serious livestock disease and Jimmyweed will cause "milk sickness" which is transmissible to humans.

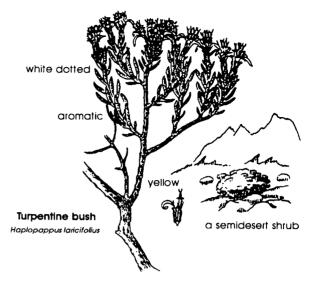
Both of these shrubs are quite a bit smaller than the Turpentine bush. Of all the *Haplopappus* species, the Turpentine bush can get the largest. It is generally thought to have the best characteristics for landscape uses, but there may be other species with desirable traits.

Use of the Turpentine bush in the landscape is just beginning, and may take some time before it gains in popularity. Purchasing this plant at nurseries may not be easy, but it can be found with persistence.

In the landscape, it can be used as a foundation plant along a west exposure. The flat-topped plants make a great border, or along a sidewalk. If one has an arroyo or or is trying to create one, this plant would be right at home. A desert landscape without one would be like Easter without eggs!

Soil requirements for this genus are not too complicated, but addition of amendments is appreciated by the plants. This rugged plant grows in about every every type of climate imaginable in rocky crevices, alluvial fans and mesa edges. So when planted in the landscape, it will receive more T.L.C. than in its natural habitat and should thrive.

There may be one drawback to this plant, although it is rather trivial. Seedlings tend to sprout from the mother plant. A nonselective herbicide will take care of the seedlings or even better



would be to use a pre-emergent herbicide. Perhaps the most humane way to control these seedlings is to dig them out, pot them up and let them grow (maybe even sell them!).

Pruning this plant is totally unnecessary. Since the shrub will only get a couple of feet tall at maturity, proper planning will allow it to grow naturally, and it can be left alone.

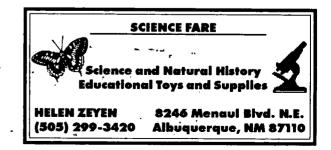
The genus *Haplopappus* has some herbal and medicinal value, but appropriate proportions must be made. Certain species do contain poisonous toxins, so care must be taken to select the right *Haplopappus*.

For a no-hassle evergreen shrub, try using try Turpentine bush. It will also supply some color in the winter months when not many desert plants are blooming.

Editor's note: The minty smell of the air after rain in places like the lOrgan Mountainsis due to the leaves of this shrub. This shrub seems to do well in my native plant garden.

Joe Pearl has been a Southwest landscape professional for 17 years. He currently a horticultural consultant in Mesa, Arizona.





View from the South (One member's opinion)

Addressing President Bush as "the environmental President" would be comical if the repercussions were not so severe. If you believe President Bush is a bad dream when considerating the long term outlook for the environment versus short term profits, let me introduce you to a real nightmare, Senator Pete Domenici. Nightmare because Senator Pete always backs the Bush moves and has some of his own as well. 3

Borrowing a cause from up north, Domenici is opposing the creation of a National Recreation Area in the Jemez Mountains. This proposal was introduced in the House by Rep. Bill Richardson and passed. A companion bill was introduced in the Senate by Sen. Jeff Bingaman. Now comes Pete, according to the Albuquerque Journal, saying that he is a strong believer in the "multiple use" concept of Federal Lands and that although the legislation states that logging, grazing and other uses of the land will still be allowed they will suffer as they're "shoehorned" in and around recreational activities. Obviously Pete feels it is alright to "shoehorn" recreation in and around commodity interests on public lands, but not ever the reverse.

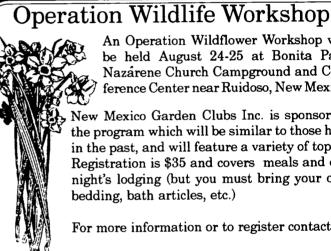
In response to a letter supporting maintenance of the current appeal process regarding U.S. Forest Service decisions, Pete says, "However, I believe it is important to avoid



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burdening communities and individuals with the threat of continuing appeals." My response is that the appeals process which merely calls for the next higher headquarters to review a decision has been and will continue to be a blessing to "communities and individuals" in the long run, because it provides an additional check against an action that may do irreversible damage. I have been personally involved in appeals of five forest service decisions. In all but one, our point of view was upheld in one way or another by the Forest Service. The fifth case finally wound up in court where our view was upheld by the judge. Unfortunately, a lot of damage had occured in the last case before the operation was halted. Come on Pete, who are you trying to protect?

> Tom Wootten June 3, 1992



An Operation Wildflower Workshop will be held August 24-25 at Bonita Park Nazarene Church Campground and Conference Center near Ruidoso, New Mexico.

New Mexico Garden Clubs Inc. is sponsoring the program which will be similar to those held in the past, and will feature a variety of topics. Registration is \$35 and covers meals and one night's lodging (but you must bring your own bedding, bath articles, etc.)

For more information or to register contact:

Operation Wildflower 1709 Brown Road Las Cruces, New Mexico 88005

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