

## BULLETIN

*of the*

AMERICAN ROCK GARDEN SOCIETY

## PENSTEMON NUMBER

Vol. 4

July-August, 1946

No. 4

## CONTENTS:-

*Page*

53—Introducing our Penstemon number .....	E.T.W.
54—Penstemons now have a society of their own .....	R. W. Bennett
57—Beauty among the Penstemons .....	A. F. Priest
58—Contrasts among the Penstemons .....	A. F. Priest
59—The life span of Penstemons .....	Claude A. Barr
61—This life span question .....	Ralph W. Bennett
62—Requisites for success with Penstemons .....	Ralph W. Bennett
65—Penstemons in Maine .....	Mrs. Edward M. Babb
66—Penstemons in a New York garden .....	Dr. C. R. Worth
67—Penstemons in a Nebraska garden .....	Fern T. Irving
68—Penstemons in Northwest Missouri .....	Olga R. Tiemann
70—Penstemons in Kansas .....	Mrs. H. P. Magers
71—Two Penstemons cultivated in Montana.....	Mrs. William Hebert
71—A Montana garden treasure .....	Clara W. Regan
71—Penstemon ambiguus .....	A. F. Priest
72—Penstemon angustifolius .....	A. F. Priest
73—Penstemon dissectus .....	Mary G. Henry
74—Eastern and midland Penstemons .....	E.T.W.
76—The American Rock Garden Society	

*Published by the American Rock Garden Society and entered in the United States Post Office at Plainfield, New Jersey, as third class matter; sent free of charge to members of the American Rock Garden Society.*

# DIRECTORATE

## BULLETIN

<i>Editor</i> .....	Dr. Edgar T. Wherry .....	University of Pennsylvania Philadelphia 4, Pa.
<i>Associate Editors</i> .....	Carl S. English, Jr. ....	Seattle, Wash.
	Mrs. J. Norman Henry .....	Gladwyne, Pa.
	Mrs. C. I. DeBevoise .....	Greens Farms, Conn.
	G. G. Nearing .....	Ridgewood, N. J.
<i>Exchange Editor</i> .....	Harold Epstein .....	Larchmont, N. Y.
<i>Publishing Agent</i> .....	Arthur H. Osmun .....	Plainfield, N. J.

## AMERICAN ROCK GARDEN SOCIETY

<i>President</i> .....	Dr. Ira N. Gabrielson .....	Washington, D.C.
<i>Secretary</i> .....	Arthur H. Osmun .....	Plainfield, N. J.
<i>Treasurer</i> .....	Mrs. George F. Wilson .....	Easton, Pa.
<i>Vice-Presidents</i> .....	Mrs. C. I. DeBevoise .....	Miss Elizabeth Gregory Hill
	Leonard J. Buck .....	Dr. H. H. M. Lyle
	Roland G. Gamwell .....	Mrs. G. H. Marriage
<i>Directors—</i>		
Term expires 1947 .....	Peter J. van Melle .....	
	A. C. Pfander .....	
	Marcel Le Piniec .....	
	Harold Epstein .....	
	Kurt W. Baasch .....	
Term expires 1948 .....	Walter D. Blair .....	
	Mrs. J. M. Hodson .....	
	Mrs. Clement S. Houghton .....	
	Mrs. Jay W. Willson .....	
	Arthur R. Virgin .....	
<i>Director of the Seed Exchange</i> .....	Mrs. L. D. Granger .....	New Rochelle, N. Y.

## REGIONAL CHAIRMEN

Northwestern .....	Carl S. English, Jr. ....	Seattle, Wash.
Oregon sub-group .....	Warren Wilson .....	Maplewood, Oregon
Western .....		
Northern .....	Mrs. Warder I. Higgins .....	Butte, Mont.
Rocky Mountain .....	Mrs. G. H. Marriage .....	Colorado Springs, Col.
Central .....		
Lakes .....	Robert M. Senior .....	Cincinnati, Ohio
South Atlantic .....		
Middle Atlantic .....		
North Atlantic .....	Harold Epstein .....	Larchmont, N. Y.
New England .....	George Graves .....	Boston, Mass.
Maine sub-group .....	Francis O. Libby .....	South Portland, Maine

*The American Rock Garden Society, incorporated under the laws of the State of New Jersey, invites you to join with its members in the pursuit of a better understanding of the problems of rock gardening. The annual dues are \$3.50. Address all communications to the home office, 57 Sandford Ave., Plainfield, N. J.*

# BULLETIN

of the  
AMERICAN ROCK GARDEN SOCIETY

VOL. 4

July-August, 1946

No. 4

## INTRODUCING OUR PENSTEMON NUMBER

SCANNING the pages of past issues of this Bulletin will show that several of the genera which are traditionally the mainstay of the rock garden have received but little discussion. Over 25 references have been made, however, to the genus *Penstemon*\*, indicating a growing interest in this group. Accordingly, when the plan of devoting special issues to single genera was formulated, this was one of those selected.

There are two ways in which this epithet may be spelled,—with or without a *t* at the end of the first syllable. The situation is that Mitchell, who proposed the word in pre-Linnaean days, spelled it without the *t*; when Linnaeus used it (as a species epithet) he felt that since the latin word for five had a *t* in it, the spelling should be changed correspondingly. Modern taxonomists hold, however, that the original spelling ought to be retained; and fortunately it is the more euphonious.\*\*

The genus *Penstemon* belongs to the Snapdragon Family (*Scrophulariaceae*), which includes several other genera of interest to rock gardeners,—*Collinsia*, *Linaria*, *Mimulus*, *Synthyris*, and *Veronica*. Opinions differ as to how many species it comprises, but even the most conservative student will admit that there are at least 150; all but one of these (*P. frutescens* of east-Asia) are North American. They vary widely in habit and flower characters, but many of them are strikingly beautiful and deserve a place in every rock garden.

Since the species are numerous, and the boundaries between them are not always clear-cut, nor the published descriptions fully informative, ascertaining the correct names is often rather difficult, and many rock gardeners grow attractive kinds under mistaken species epithets. Fortunately, two of this country's leading taxonomists,—Dr. Francis W. Pennell of the Academy of Natural Sciences of Philadelphia, and Dr. David D. Keck of the Carnegie Institution Laboratory at Stanford University, California, have made extensive technical studies of the genus, and can furnish authentic identifications to anyone sending in pressed specimens showing basal and cauline leaves and well-preserved flowers.—E. T. W.

\*Vol. 1, pages 6, 8, 14, 31, 85, 86, 87, 116; vol. 2, pages 32, 43, 107; vol. 3, pages 5, 35, 38, 58, 91.

\*\*According to Standardized Plant Names, ed. 2, the first syllable is to be accented. On the other hand, botanical manuals and Bailey's Hortus II accent the second syllable. Since the latter plan brings out the derivation of the word better, it is preferable.

## PENSTEMONS NOW HAVE A SOCIETY OF THEIR OWN

**P**ENSTEMON is a vast group of plants, which, though with one exception confined to North America, are almost unknown to the average American gardener, in spite of the fact that they are greatly appreciated abroad. In any English garden of consequence they form an important element and Soares wrote in 1924 that "All varieties of *Penstemon* are much used in Great Britain and Europe." Yet, they are not popular in their own country, and as late as 1943 C. W. Wood said, speaking to American nurserymen, "The opportunity for the use of this large, graceful plant group has not yet been touched upon."

There is no finer genus of flowering plants in the world. There are no more beautiful rock plants than some western species of *Penstemon*. Most of the two hundred-odd species are exciting to the eye. Some have great masses of flowers, out of all proportion to the size of the plant. As a rule they are extremely floriferous, and on many species each stem is a whole bouquet in itself. Most of the species are worthy of prominent positions in the garden.

In color they cover almost the whole range. The purple portion of the spectrum predominates, but there are a great many species with flowers of brilliant blue, the color that is most scarce in nature. They also have bright red, scarlet, pink, lavender, and white representatives. They are weakest in yellow and orange, but these colors are represented to some extent. Many of them bloom during midsummer, when it is so hard to keep color in our rock gardens. With only a few species we can stretch the season of bloom over five months, from late April through September.

"One valuable characteristic of all Penstemons is the way the flowers come into bloom on the spike. Instead of a sequence of the bloom with single flowers from the base of the spike to the tip, there are clusters of flowers in the axils of bracts, and one flower and then another opens in each cluster; so there will be a full spike of flowers in bloom for several weeks" (Longley).

Dr. Gabrielson said of Penstemons, "This almost entirely American race is a vast aggregate of species containing more potential garden value than any other group of western plants." Purdy gave as his experience that "When once established there is no plant that gives a longer early-summer bloom even in the driest situations. Give them moderate moisture and they excel and seem never out of bloom from May on;" while Lamb exclaimed that "Some of the showiest plants in cultivation are in this genus."

Rock gardeners who are lovers of alpiners will find among the Penstemons some of the best alpiners in cultivation. They have for a long time been considered an indispensable part of English rock gardens. Mrs. Rowntree, in discussing their adaptability to lowland gardens, pointed out that "Penstemons as a rule behave better than many other alpiners and mountain plants when asked to carry on at lower levels;" and D. M. Andrews, "Acclimatization is accomplished easily between sea level and 5000 to 7000 feet above."

Of the forty or more species which it is possible to get hold of now, out of the total number of some two hundred, in only a few cases is it easy to say that a particular one is inferior to others and should not be given space in the garden. Almost every species has something about it that

makes us want to grow it, even though we know we do not have room for all of them. As between the top-ranking two dozen or so species which are really spectacular, about the only way we can select a smaller list than the entire number is to put the names in a hat and draw some out.

If Penstemons are as spectacular as this and offer such wonderful horticultural possibilities, why is it that we do not see them in gardens everywhere, being depended on as a principal source of color? As far as rock gardeners are concerned, it is not because our nurseries have not brought them before the gardening public. The catalogue of every rock plant nursery extols Penstemons to the sky, yet they are seldom seen in average rock gardens. The catalogues that offer ordinary plants, not rock plants, seldom include more than one or two kinds and some do not mention them at all. Why is this?

To answer these questions we must be realistic, even though it may hurt our pride as gardeners. The plain, unvarnished truth is that Penstemons are *not* easy to grow under ordinary garden conditions, the statements of nurserymen to the contrary notwithstanding, in many sections of the country, and particularly in those sections where rock gardens are most abundant.

We read this article and that by people in one section of the country or another who have had wonderful success with Penstemons and who write in such glowing terms of them that we become filled with enthusiasm. We order some from our favorite nurseryman and set them out, full of anticipation. In six months every one of them is dead. We cannot believe that we are such poor gardeners that we have killed these plants by our own stupidity in planting. We blame it on "unusual weather conditions." We order some more plants and try again, this time taking more pains, even looking up the cultural recommendations in the catalogue and trying to follow them. The new plants never become established and they too are soon dead. This may sound fantastic, but it is exactly what happened to me in 1944 and 1945. After a careful period of self-analysis we decide that we have not treated these Penstemons any worse than we treated our other rock garden plants, and yet they have died. We decide that they must be very difficult to grow, and unless we are persistent, we give them up.

If then we turn again to the articles in the gardening magazines by Mr. Wood, Mr. Hamblin, Mr. Rose, Rex Pearce, Mr. Barr, Mrs. Norton, or Mrs. Marriage, we read that these people are growing Penstemons without any particular trouble. We feel ashamed of ourselves. Something must be wrong with us. What can it be?

A correspondence circle (round robin) on Penstemons was started early in 1945 to try to answer this question, to find out what is the trouble with the average gardener that makes it impossible for him to grow these plants as such writers say they can be grown. After a year of extreme activity the members of this circle decided that it was about time for Penstemons to have a society of their own, to draw all the enthusiasts in the country together into a concerted effort to find out the answers to these perplexing questions, and by so doing, to put Penstemons on the road to becoming an important part of our garden family. Since there was not already such a society, they have named themselves the American Penstemon Society, without going through any formal organization procedure.

The members of this society are for the most part ordinary dirt gardeners, scattered all over the country, who have an intense enthusiasm for Penstemons in spite of repeated disappointments and are determined to find the secret. They feel convinced that these plants can be grown almost anywhere in this country successfully if only we do the right things for them. We are trying to find out what these right things are, by growing a great many species under all possible conditions and in all parts of the country, and are trying to deduce what they need to make them happy. The very informality of this organization permits it a certain freedom which more formally organized societies sometimes do not enjoy. Every member seems to have taken it upon himself or herself to accumulate information about Penstemons through growing them in the garden and reporting on their behavior, instead of sitting back and letting a few members do it all. There are at the present date approximately one hundred members.

The original round robin circle has expanded now into eleven circles. These circles will continue to be the principal source of information for the solving of the perplexing questions mentioned above. If all the correspondents could be included in one circle, the society might not be necessary; but this would be impractical. The round robins are the life blood of the whole thing. The society is only a device to consolidate the information brought out in them. The secretary of the society, who is also the director of the robins, is going to issue mimeographed bulletins several times a year, summarizing the information brought out in the previous rounds, so that all the members will know what the other circles have brought out and will not need to go over the same ground.

It is hoped that eventually the society will be able to publish a manual on Penstemons that will be the last word on the subject. There is now no such thing to be found. In the meantime the secretary, after studying all the information that he could find in the literature and that brought out in one year of robin correspondence, has gotten out a booklet of tentative recommendations on the culture of Penstemons for the information of persons who are starting out to grow them, in the hope that with the aid of these suggestions beginners may be spared the necessity of going through a lot of disappointments. These tentative recommendations have been reviewed and concurred in by six growers of these plants in different parts of the country. This booklet is not for distribution to the public, since it is entirely tentative, but is sent to members of the society only. When our authoritative manual comes out, in four or five years, it will be made available to the public.

Meanwhile, the Secretary hopes soon to issue a mimeographed booklet discussing the numerous species from the standpoint of the horticulturist; detailed descriptions of sepals, bracts, etc., such as are given in technical botanical writings will not be included, but there will be sufficient data to make it possible to decide whether the plant came to the garden correctly labelled or not. Available information as to native habitat will be included by way of a guide to the most promising cultural procedure, and this will be supplemented by a summary of the experience of gardeners with individual species, so far as recorded in the literature.

This society is unique in that it is not interested in building up a large membership for the sake of numbers alone. It wants only members who will really work with Penstemons and help to solve the difficult problems

connected with their culture in different parts of the country and the selection of the right species for each part. Instead of membership depending on the payment of dues, membership in this society is acquired by promising to work actively for the furtherance of *Penstemon* information by whatever means are most peculiarly within the member's power. The member is expected to grow a number of species in his garden and report semi-annually on their behavior, to try out new species, and to cooperate with the other members in the exchange of seeds as well as information. Persons who do not have gardens of their own may do their share by contributing from their general knowledge of horticulture or from observation.

All persons interested in *Penstemons* and wishing to have a share in helping American gardeners to find out how to grow them are invited to join the Society. Address—RALPH W. BENNETT, *Secretary*, 5607 North 22nd Street, Arlington, Virginia.



BY EDGAR T. WHERRY

The magnificent giant blue-flowered *Penstemon subglaber*.  
Canyon southwest of Pocatello, Ida.

## BEAUTY AMONG THE PENSTEMONS

THERE is not a State in the Union which can not boast of at least one species within its borders of the genus *Penstemon*, often known by the common name of Beard-tongue in reference to the characteristic hairy tongue-like sterile stamen. It would require a large-sized volume to treat of the distribution, the variety, and the beauty of the numerous species. Their range in flower-color is wide; they come in red, white, and blue, all sorts of intermediate hues, and a few are even yellow or yellowish. In habit they vary from dainty mat-forming creepers to 8 or 10-foot giants. The leaves show great variation not only in outline, but also in hue, some having the foliage almost blue, other silvery gray, while in winter it often turns to rich red or bronze.

In my experience the following of the showier kinds are easily cultivated—provided that one remembers their need for lean soil, good drainage, plenty of light and air, and protection from competition by rank, floppy neighboring plants.

Three of the best blues are *P. nitidus*, the earliest to bloom here; *P. angustifolius*, coming two weeks later, and showing some variation toward lavender; and *P. caelestinus* (once distributed under the non-valid name of *missouliensis*), one of the very best.

A dainty creeper is *P. crandalli*; this forms a mat with fine evergreen leaves, well covered in spring with pretty beard-tongue blossoms, usually blue though sometimes of rose or white color-forms. In our climate this requires a sheltered spot by the side of a rock where it will be protected.

In a lightly shaded part of the garden, the lavender *P. gracilis* is willing to grow. On the other hand, the white *P. albidus* requires full sun. These are moderately tall. Then there are two interesting dwarfs: *P. micranthus*, while not at all showy, is unique in its compact heads of tiny blue-purple flowers borne in an interrupted spike as though it were a mint. *P. pygmaeus*, a trade name for what is supposed to be a sport of the eastern *P. hirsutus*, has to be propagated by divisions or cuttings.

To search out these charmers where they stand vigil in the high places is an intriguing hobby.—A. F. PRIEST.

## CONTRASTS AMONG THE PENSTEMONS

**M**ANY contrasts may be found within the major plant genera of the world. Yet I doubt if any one American genus can boast of more differences, more opposites, more contrasts than are to be found among the Penstemons. They grow large and small; there are shrubs, mat formers, little tufty cushions, and even a vine (though it is tender in colder climates.) They flower in a wide range of colors, blues, purples, reds, pinks, whites and yellow. There is even a black one, at least if the famous "Tulipe Noire" may really be classed as black.

For contrast in size let us look at *P. procerus* whose entire flower-cluster of numerous tiny beard-tongues can be thrust inside a single huge trumpet of *P. cobaea*. Or consider *P. murrayanus* as it towers five feet "and has been known to reach seven feet," while it looks down upon *P. crandalli* scrambling about flat on the ground. Or pick up a basal leaf of *P. calycosus* with its fourteen inch length and four and one half inch width and compare it with the less than an inch long grass like blade of *P. aridus*.

Contrasts in the shapes of leaves are always interesting as well. *P. murrayanus* bears leaves which inclose the stem, and in some plants the edges turn up forming a shallow saucer which will hold water. The very rare *P. dissectus* on the other hand bears fern-like leaves. *P. crandalli procumbens* is clothed in tiny little rounded leaves while *P. haydeni* goes to the other extreme with long and very narrow foliage. Many species have leaves which are toothed in different shapes and patterns.

Color furnishes an added contrast to the leaf pattern,—observe the blue-green foliage of *P. grandiflorus* in comparison with the dark green of Ozark *P. cobaea*. Many different foliage tints may be noted in the various species. Several take on a hint of purple or red with the advent of winter. We also find certain species pubescent with downy hairs although mostly they are glaucous leathery leaved.



Penstemons vary considerably in form of growth. One would hardly imagine from the grassy tufts of *P. jamesi* that it was any relation whatever to the large matted clumps of *P. barbatus*. Nor would the rounded mounds of *P. ambiguus* remind us of the kinship of *P. unilateralis* with its one-sided spikes of bloom. Or could the erect blue spikes of *P. angustifolius* possibly belong to the same genus as the broad racemes of the sprawly shrub, *P. fruticosus*?

Yes, that tell-tale sterile fifth stamen gives them all away; whether bearded or glabrous, it is the one mark of distinction along with their sharp pointed seed pods which set them apart from the related genera.

A. F. PRIEST, Peru, Iowa.

## THE LIFE SPAN OF PENSTEMONS

THOSE who garden outside the native range of most species of *Penstemon* and, as may unfortunately happen, have their carefully attended purchased plants or seedlings depart suddenly, and without leaving an explanation or apparent excuse, into never-never land, question as to the natural age limits among this large group of variously exciting, thrilling and aristocratic or ingratiating, lovable and modest or sometimes indifferent, wilful or exasperating, members.

Qualified to offer some impressions by a familiar sojourning among Penstemons for a third of a century, growing in my garden most of the Great Plains species as well as a considerable number from other regions, I should advise, firstly, that impressions from early failures, even though repeated, may fairly be rated misimpressions; and, secondly, that the too-often gossiped inference that Penstemons are short lived has no proper basis. While it is true that some species are not well implemented for long years of heavy blossom and seed production—blossom and seed crops are often of such a scale as to be approached by few other plants—it appears that the complete exhaustion and death of a plant is fully as often the trick of fateful weather and other environmental factors as of simple old age.

*P. albidus*, a large-flowered species mostly reported to be dingy, with its impure white further dulled by purple-black lines, but in its snow-white form one of the most enchantingly lovely of all Penstemons, is doubtless one of those least endowed against weather emergencies. Growing in great fields in fine-textured and compact loams of low humus content, a narrow range of adaptability is evidenced by its stands terminating abruptly and completely where the soil changes to more sandy, more clayey, or richer. Add to this that its preferred medium readily dries out beyond endurance, especially in the presence of competing vegetation. Yet *P. albidus* may live to five years, perhaps longer.

Quoting from an article by the late D. M. Andrews, *The National Horticultural Magazine*, Oct. 1933: "It is no uncommon occurrence for a natural colony of *P. unilateralis*, notably ephemeral, to flourish and empurple a large area with its flowering and then disappear completely until two or three seasons later when renewed by seedlings." Yet a plant of *P. unilateralis*, with its characteristic tall spires of blue and purple bloom, growing in my dooryard with no special care, attained to more than two feet in its second year, to near four feet in the three succeeding seasons, and encountered irresistible drought in the beginning of flowering in the sixth summer.

Grant if you like that four to six years constitute a brief life term. What of such as *P. crandalli*, blue-starred, mat-forming, creeping gem that sends down fully supporting roots from frequent nodes along every advancing stem? In my garden it has had no other care than protection from encroaching neighbors and a high slat shade to temper the Plains sun and air which are far more burning and desiccating than those of its native high valley in the Rockies. It has been with me for a dozen years; and, as it annually renews itself, why can it not go on indefinitely?

There are several such creepers. There are the many shrubby Penstemons, several of which I have tried and have not been able to please in my dry environment—but surely shrubs are not short lived where suited. And there is a considerable group of upright-growing herbaceous kinds that make wide crowns and so are not dependent on a single set of roots. *P. procerus* and *P. humilis* are worthy examples that make new crowns from short underground stems. If any of such as these live but briefly, it



BY EDGAR T. WHERRY

That blue-starred, mat-forming, creeping gem, *Penstemon crandalli*.  
On dry volcanic rock, Gunnison Co., Colo.

can certainly be credited to some untoward condition or combination of handicaps that interfere with the normal perpetual renewal of their kind.

So, shall we not agree that it is neither scientifically accurate nor indicative of wide acquaintance with Penstemons to term the race, without qualification, short lived?

Nearly all the Plains Penstemons, like *P. albidus* and *P. unilateralis*, rosette forming, with more or less single root systems, thick stemmed, fitted indeed for a day of glorious bloom and prodigious effort toward leaving a numerous progeny, are thus structurally vulnerable to freaks of weather. Therein lies their weakness. Let their food supply be but adequate for subsistence, their moisture supply be niggardly but reasonably steady, and

you have the staging for a more even tenor and more lasting way. *PP. albidus*, *alpinus*, *angustifolius* and *buckleyi*, *cobaea*, *eriantherus*, *glaber* and *grandiflorus*, the rare *haydeni* and *nitidus* and *secundiflorus* are of this sort, while *jamesi* and *gracilis*, more slender, and a very large number natively more western, are subject to the same fatality. There is of course variability. *P. glaber* is a stalwart in endurance and almost in a class by itself. It has been known to live ten or twelve years.

For such as these, Andrews, in the article above referred to, has carefully outlined the course for the simple life. To quote at random: "Being under the necessity of renewing the rosette or of producing laterals or buds from the old crown, a lush growth at flowering time, followed by heavy seed production, may result in complete exhaustion from which there is no rallying. A moderate growth induced by a lean soil and a sparing but dependable moisture supply will afford optimum conditions for the dry-land species of the plains and foothills. . . . After flowering take care to remove old stems promptly, stir the soil, and water if very dry. When the formation of buds or laterals is evident, further activity should not be encouraged."

If anything need be added, it is, doubtless, that dry climate plants enjoy dryness, within limits. By all means a chance to dry off after any sort of wetting is important. An essential of good culture, then, is an airy situation. Much sun, a shallow surfacing of fine gravel or stone chips about the crowns, and underdrainage sufficient to carry away, downward, the temporary excesses of water in the soil, are all aids that the ardent host of Penstemon beauty will not hesitate to press into service. Much or little alkalinity is a common factor in dry climate soils; try a bit of healthful lime and be sure of enough potash to build stiff stems. And try different soil mediums and situations.—CLAUDE A. BARR, Smithwick, S. D.

## THIS LIFE SPAN QUESTION

**W**HETHER Penstemons as a group are short-lived or long-lived, or some species are short-lived and others long-lived, or whether they are all long-lived under suitable conditions are factors of great importance in the selection of species to be grown in the garden. Unfortunately for Penstemon lovers, a reading of the literature in search of enlightenment on this point brings forth, not enlightenment, but confusion. Writers on these plants seem to be divided into two groups—those who say that Penstemons are short-lived as a family or contain many short-lived species and those who say that they are not inherently short-lived.

For example, Mr. C. W. Wood wrote: "It is well to make up your mind at the start that many of the species are going to be short-lived, and no amount of coaxing seems to make them otherwise." Mr. Hamblin said that certain species are monocarpic; that no matter how they are treated, they bloom once, set seed, and then die. On the other side we have Mr. Barr saying that Penstemons are naturally long-lived. Mrs. Wilder in one of her books wrote: "Mr. Purdy told me that he is of the opinion that few, if any, species are genuine biennials. They are short-lived because certain garden conditions are unfavorable to their longevity." Here we have four Penstemon authorities, who I suppose we could say are of equal rank, Wood and Hamblin on one side, Barr and Purdy on the other, two of which make statements that are just the opposite of what the others make.

While I was puzzling over this situation and trying to make up my mind whom I was going to believe, I received a copy of a booklet entitled "Wild Flowers in the Mid-West," by Mr. Arthur E. Rapp, of Council Bluffs, Iowa, in which he makes the statement that many wild flowers have critical periods when they either live or die according to whether the conditions at the critical time are favorable or unfavorable. This set me to thinking. I remembered a field near my home that was dotted for years with the pink flowers of a species of *Sabbatia* until suddenly one year they all disappeared and never have appeared there again. The implications in Mr. Rapp's statement became more and more obvious the more I thought of it. Don't we have in this concept a solution of our problem? Isn't this the missing link which will bring two sets of contradictory statements into harmony?

Instead of saying that one set of writers must be right and the other wrong since their statements are directly contrary, and then finding ourselves in the unpleasant position of having to decide which set is right when we have great respect for all of them, cannot we resolve the apparent conflict by restating Mr. Rapp's idea as follows: Penstemons have certain critical periods in their life span when their survival or failure to survive will depend on the conditions at the time. Some species can tolerate a wide range of conditions at these critical periods, while other species can tolerate only a narrow range of conditions. Those that have been thought to be perennial or long-lived are the tolerant ones. Those that have been called short-lived or biennial are the ones that at their critical periods cannot survive unless the conditions fall within a narrow range. And, carrying this reasoning to its logical conclusion: All Penstemon species are perennial when the conditions under which they are grown meet the requirements to which they have become accustomed.

Here, it seems to me, is the real truth of the situation, the magic formula. If we can accept that, we can say that all our authorities are right, but that they didn't express their ideas in just the right wording. The only remaining problem then is to learn what the conditions are which Penstemons require in order to be perennial. The American Penstemon Society is working toward that end through a series of scientific experiments, and it is hoped that within a year or two we shall have definitely established the truth, whatever it is. It is my personal belief that the truth will prove to be as I have stated it above.—RALPH W. BENNETT

## REQUISITES FOR SUCCESS WITH PENSTEMONS

AS DIRECTOR of a round robin circle on Penstemons for the past year I have been able to get the consensus of opinion among ten growers of Penstemons in different parts of the country as to the best way to succeed with them in gardens. I have supplemented this by studying all the writings on the subject that I could find in the Department of Agriculture library, which I believe would cover about all of them. From these sources of information the secrets of success with Penstemons appear to be fairly obvious.

The literature on Penstemons is by no means scant. The trouble is that the writers do not agree among themselves as to what we should do. It is especially hard to pick out the really essential points from those which may be only incidental. There are certain points, however, on which there is such almost complete unanimity of opinion that we may be fairly sure of our ground.

The real key to success with Penstemons, at least with those species that are hard to grow in some sections, I feel sure, is to grow them in a very gravelly soil, a scree, as a matter of fact. For the fussy species there should be at least 50 per cent of stone chips in the soil. The other 50 per cent should be half sand and half soil. The less fussy the species, the smaller the proportion of stone chips may be. The chips should be rather small—the size commonly sold as "half inch."

Most writers explain this point by saying that Penstemons cannot stand wet soil around their crowns during the winter; in other words, that they insist on absolutely perfect drainage of the surface, as distinguished from drainage of the deep soil. To further enhance this surface drainage it is recommended that we put a two-inch layer of small stone chips over the top of the scree soil. Thus the crowns will rest on stones and it will be impossible for water to remain standing around them. For the fussiest species we can go one step farther and plant them on top of little hills in the rock garden, so that the ground will slope away from them in all directions.



BY EDGAR T. WHERRY

It would be fine if Penstemons would thrive in our gardens as does the blue *P. hesperius* around Crater Lake, Ore.

This consideration—of an extremely stony soil insuring perfect drainage of the surface—is, in my opinion, the key to success and outweighs all other considerations in the growing of penstemons as three is to one.

There are two other important points, though not of anywhere near the importance of the first one. One is that Penstemons want as much sun as they can get. They may not demand sun all day, but they will enjoy it. Even in sections where the sun is hot during the summer they seem to love to bask in the sun.

The third point is that Penstemons like to stand by themselves and not be crowded by other plants. As Amel Priest puts it, they are children of the great open spaces and like lots of sunshine and air. They will not live among heavily foliaged plants which bend over them. It is much better to devote special slopes in the rock garden to them and to plant them on the

points of the hills and ridges, between rocks, and in other places where other plants cannot grow over them. Other plants can be put among the Penstemons to bloom when these are not in flower, but such plants should be small and unobtrusive, or, if larger, should not have heavy foliage.

All other points of garden culture, though of importance with some families of plants, are of relatively little importance with Penstemons, according to the writings and my own experience. Whether we put leaf-mold in the soil or not, whether the soil is acid or alkaline, whether we water them or not, seem to be matters of indifference to Penstemons. This, it seems to me, is borne out by the fact that equally good horticulturists make diametrically opposite recommendations on these points. I know that most of these writers will not agree with my premise, because one says they must have acid while another says they must not have acid, and so on; but I, occupying the middle ground and reading all their writings, still maintain that we can dismiss these points from our minds and concentrate on the three really important points.

I might mention one other thing, because it is not even hinted at in any of the articles that I have seen, and it will eliminate a lot of heart-aches. Penstemons are extremely slow as a rule to get established after being moved. I know that nurserymen will castigate me for saying this, since they never say a word about it in their catalogues; but I can give evidence to prove my statement. I bought twenty species of Penstemons from reputable nurseries last year and set them out with the best of care in good rock garden soil, and yet fifteen of them were dead inside of six months. After nine years of intensive gardening I think I can claim to be not subject to the charge that I killed these plants by my stupidity in handling. Penstemons simply cannot stand wet soil for the first few months after spending several days boxed up in transportation, and yet we cannot control the weather.

There is only one safe way to treat Penstemons after being moved and that is to set them in a sand bed composed of half coarse sand and half pea-size gravel. This was told to me by a well-known collector of these plants. They should be left in the sand bed until they have lost all signs of suffering during transportation and have begun vigorous new growth.

Penstemons, at least the most spectacular ones, are as stubborn as mules and as temperamental as actresses are said to be. They will give splendid performances if we give in to their whims and treat them as they want to be treated. But they would rather die than yield one inch of their whims and grow under conditions that they do not like. It is useless for nurserymen to write in their catalogues "of the easiest culture" or "will grow anywhere in sun." Penstemons won't do that. They want certain things and they will curl up their toes and die if they don't get them. It is up to us to give the plants what they want, if we are to enjoy the splendid performances that they are capable of.

This is not so hard as it sounds. Any intelligent gardener with a moderate amount of energy can give Penstemons what they want. Gardeners go to the trouble of staking up dahlias, spraying roses, raising snapdragons from seed every year, and other such things. Penstemons demand no staking or spraying. The gardener who is not willing to make up a scree can grow them with perfect success in ordinary garden soil if he is content to treat them as biennials just as he does with snapdragons. The above recommendations on culture apply only when we want to grow Penstemons as perennials.—RALPH W. BENNETT

## PENSTEMONS IN MAINE

THE PENSTEMON clan has provided me with much enjoyment in one of my garden hobbies,—the gathering of many different species of a single genus. There seems no end in sight of this particular group, and little chance of my ever tiring of the varied members, with their fascinating range of color and height, and manner of growth. I would like to give you a few notes on their behavior here in Maine. Most of them have blossomed the second year from seed, many have continued blooming for several years, and have been completely hardy as far as the cold is concerned; losses have been mostly from wet, cold springs, before growth started, or from my own neglect or ignorance of their needs.

*Penstemon humilis* was the first species I ever grew, and it was delightful; although I haven't had it for years now, I well remember its dainty colorful blue spikes. *P. nitidus* is always the first to bloom, with pink buds and sky-blue blossoms; it lives for several years, and blossoms sparingly, but fails to increase, remaining a neat little silver-gray rosette. *P. angustifolius* is similar but taller, up to a foot, and lives for a few years; but *P. secundiflorus*, with one-sided spikes of lavender, passes on after blooming with no apologies. *P. grandiflorus* is also consistently biennial with me, making its large pure-gray rosette the first year, and its tall inspiring stem of huge lavender trumpets the next, and then disappearing. Sometimes a plant will grow new sideshoots, and continue in bloom for another year, but not as a rule. *P. unilateralis*, with more pink in its flowers, is also inclined to be biennial.

The shrubby species have usually lived long, but dislike a wet spring. *P. diffusus* and *ovatus* are rather similar, while *P. cardwelli* is lower-growing; their clumps of dark foliage and many stems of purplish-blue flowers are effective backgrounds for the airy-stemmed bluebells, and warm lavender-pink blossoms (somewhat like those of *Malva moschata*.) *P. scouleri* is another story; no species has been more spectacular at its best than this, when its display of lavender trumpets was breath-taking. I must confess that never again did it equal its great triumph, but I didn't dream then of pruning it back, as I should have done, like other spring shrubs. It is definitely on my "Try again" list.

The eastern species *P. hirsutus*, and its dwarf brother *P. pygmaeus*, are easy, of course, seeding themselves and persisting year after year. I am fond of them, although they have no striking beauty compared to the western species. Their warm lavender and white tubes are good companions for the rose and purple Spiderworts, pink Ragged Robin, and bright purple Chives. *P. digitalis* is another easy-doer, with tall strong stems of white blossoms growing well with golden Thermopsis and starry Northern Bedstraw. *P. procerus* is not at all showy, but I like its neat mint-like clusters of dark blue. This year, to my surprise, I have found no plants; I have no idea when or why they left me, but I miss them.

The mat-forming species have been none too happy with me. *P. menziesi* and *rupicola* lived a few years, and blossomed well at least once, but eventually departed; the beauty of their purple and rose trumpets made me anxious to try them again. *P. tolmiei* (a cute miniature of *procerus*) and *P. rattani minor*, have behaved about the same. *P. crandalli* was a joy, covering itself with its dainty blue bells each year, until I failed to save it from encroaching neighbors.

*P. alpinus* and *glaber roseus* have been a surprise; although often listed as rather fussy, both have proven completely hardy and long-lived. They display great clusters of their rich blue and rose blossoms each year, while *Potentilla flabellifolia* spreads its brilliant gold saucers just below. *P. eatoni* was one of my all-time favorites, for its spikes of glowing crimson tubes, with a background of pale green fern fronds. This succumbed to a wet spring, and I shall try it again in a spot where its toes can stay warm and dry. Other species of varied types have grown easily and blossomed well for one or more seasons, but disappeared before I was ever too sure of their correct identities. However, I can truthfully say that none of the Penstemon clan has ever bored me!

MRS. EDWARD M. BABB, Portland, Me.

## PENSTEMONS IN A NEW YORK GARDEN

PENSTEMONS in our garden have had a haphazard existence: many have been tried, but only a few have been given opportunity to show fully their merits. Our whole interest has been in the truly choice miniatures which deserve a place in the most discriminating rock garden. Many species were raised from seed, but when they showed that they were too tall or too coarse, were often planted in situations not entirely suited to their needs, or were left forgotten in the seed beds. As little note was made of their later behavior, this discussion must be limited to a few of the gems of the race, which are also among the most difficult; where these will grow, one need worry little about trouble with less glorious species. The gardener must remember, however, that many Penstemons, along with other rock plants, are not necessarily long-lived; he should be careful not to regard a species as difficult merely because a clump has lived its natural lifetime, or most of this, before he acquires it.

*P. angustifolius*, with its short spikes of dazzling azure trumpets, is perhaps the most exquisite of a group of related species. For several years (three, if memory is correct) it flowered happily on a sharp south slope in ordinary light soil. Its life span seems unusually short, but plants are easily and cheaply obtainable, or they can be raised from seed with little difficulty. A rather similar species with purple flowers, collected many years ago in Montana, has perpetuated itself by self-sowing.

Several of the species here are growing in the "sand bed"—actually a bed of sifted glacial debris. Among these is *P. laricifolius*, which makes a small tuft of fine grassy leaves from which rise slender stems of six inches or so, with rather small flowers, suggestive of an annual *Linaria*. The best pure pink forms of this, collected in 1941, have so far flowered a pinkish white; perhaps the fullest sun is necessary to bring out the color, rather than the light shade where the plants have been growing. Near these grows exquisite *P. abietinus*, one of the rarest in nature of the mat-forming dwarfs which range through Colorado, Utah, and northern Arizona. This particular species always suggests to me a dwarf heather, though the leaves are much larger, so that the resemblance is actually very slight. The small ish flowers, conservatively produced, are of a breath-taking pure light blue. The plant seems perfectly happy, though in its eight years here it has not spread to any extent. *P. crandalli*, of the same section of the genus, grows in the same bed, and also at the foot of a gravel slope it forms a good-sized



mat. To me it is a coarser, less charming plant, whose reputedly rose and white forms have flowered blue here—but having seen most species of this section in the wild, I have perhaps grown too discriminating. It certainly is deserving of the most loving care, and has the merit of ease as well as of being readily obtainable. Until its cousins of even greater beauty can be procured, it should grace every sunny rock garden.

*P. caespitosus perbrevis*, an inch-high carpet of dusty oval leaves dotted with large purple flowers, survived for a few seasons, but did not prosper. The tiny tufts of *P. acaulis* lasted only a few weeks. These species, from the hottest sagebrush slopes, are perhaps the most difficult of the entire genus, yet worth any number of trials.

Of the truly shrubby species, *P. cardwelli* (if named correctly) was cut back season after season, never flowered, never looked prosperous, and eventually died. Bought plants of *P. rupicola* never established, but one seedling, perhaps a hybrid,—for its flowers were less intense in color than the type,—lived for years in a west-facing pocket until during the war a *Silene* buried it. Of *P. scouleri*, a plant five feet across prospered for at least ten years at the base of a southeast slope, and flowered most profusely. Another from the same sowing still makes a great sheet on the summit of a mound, with no shelter from winter gales, but seems to be expiring of old age; perhaps a heavy shearing will restore its vigor. *P. montanus* is represented by a plant collected in 1941; it forms a straggling bush in the sand bed, and a cutting from it is happy in the alpine house; so far as I know, neither has yet flowered. Another species of the same shrubby section, name and source unknown, has formed a dense mound a foot across in the sunniest sand bed.

Perhaps the most successful of all the shrubby species is one raised from seed collected by a friend in the southern Sierras. It seems to be a form of *P. davidsoni*, an absolutely prostrate mat of tiny toothed leaves, barely an inch high. It loves to creep over flat rocks, and roots down in the thinnest film of soil. In early June it is completely covered with glowing red-purple trumpets an inch long. Although well over ten years old, the plants retain their youthful vigor. Needless to say, it, as all shrubby species, is evergreen.

Many other dwarfs are yet to be tried, but their difficulties should be the same as of those species already growing in the garden, so that no real trouble is anticipated.—DR. C. R. WORTH, Groton, N. Y.

## PENSTEMONS IN A NEBRASKA ROCK GARDEN

WITH OUR loess soil there is no drainage problem; it is light and sandy and drains well, but will hold moisture where the ground is shaded either by plants or rocks. This soil is naturally rich, neutral to slightly alkaline. My garden is on a south east slope and the Penstemons thrive there without any special treatment or winter protection. Some species are not too neat and some are quite variable in flower coloring; the ones that have been most showy and dependable for me are:

*P. humilis*, probably the smallest member of the family. It makes neat, lovely rosettes of dark green to bluish green, oblong leaves, nearly leafless flower stalks from 4 to 6 inches high in early June, with deep brilliant blue flowers.

*P. cardwelli*, shrubby, evergreen, about 12 inches high and the same in diameter. Leaves are leathery and very dark green. From mid-June to late summer it has blooms of a dark blue-purple in satisfactory numbers, but the most outstanding thing is the neat appearance the year round.

*P. glaber*, a native that is quite liable to vary its color, depending on the soil condition. Here it has huge puffs of a nice, medium purple, closely arranged on a very upright stalk about 15 or 18 inches tall. The leaves, mostly basal, are ovate-lanceolate, smooth and glaucous.

*P. angustifolius*, which makes one of the most brilliant spots of color in my garden. On a stalk 12 to 15 inches high, inch-long trumpets of brilliant blue with a pink throat are so crowded you couldn't put a match between them. The pink in the throat and some streaks on the back is a good color, but the mass is blue in effect. The leaves are grayish-green, linear-lanceolate and smooth. It also is evergreen.

FERN THOMAS IRVING, Omaha, Nebr.



BY EDGAR T. WHERRY

Spectacular is the word for *P. cobaea*; its hue is lavender.  
In Mrs. Henry's garden, Gladwyne, Pa.

## PENSTEMONS IN NORTHWEST MISSOURI

**S**EVEN PENSTEMONS are listed in Steyermark's "Spring Flora of Missouri." *P. digitalis* grows two to five feet tall with glossy leaves and medium-sized white flowers in cone-shaped sprays. It is found in various habitats throughout the state and makes an especially fine garden plant. *P. pallidus* is recorded as growing in prairies, open woods and bluffs, but this species I do not know.

*Penstemon grandiflorus* is found only on the hills and plains in the extreme northwest county of Missouri. I consider it one of the loveliest of all the Penstemons I have grown. The plants grow 2 to 4 feet tall, and their crisp, spoon-shaped leaves of blue-green are exactly right for the

large orchid-colored blossoms. The white form may not be native here, but I have it in my garden, seeds having been obtained from an eastern nurseryman. It is easily grown and quite as lovely as the lavender type. The seeds did not come entirely true to color but the percentage of white-flowering plants was sufficient to satisfy me. The lavender colored ones were quickly and easily rogued out.

Of the four other native Penstemons, limited to the southern part of the state, I have only one growing in my garden; but spectacular is the word for *P. cobaea*. The thick soft leaves sparkle during certain seasons as if sprinkled with ice crystals. The flowers are larger than those of *P. grandiflorus*, and vary from white to pale lavender with deeper purple markings. It grows 2 feet and more in height with stem less rigid than *grandiflorus*. For this reason one should provide some support or else the large blossoms will soon be dragging on the ground from the weight of dew or rain. *P. cobaea* is said to be one of the parents of the tender hybrid generally recommended to be treated as an annual in gardens.

*Penstemon cobaea* var. *purpureus*, also known as the Ozark Cobaea, is not often found. It is a stunning sight in bloom. It has the same sparkling foliage as the type, but the flowers are a rich purple. Stems cut for vases may be enjoyed for days. Char the stems for an inch over a flame, or put them in hot water for a few moments, to seal in the juices; then plunge immediately into cold water. If the stems wilt, repeat the treatment. Even a stem that is rather badly wilted can often be revived.

My Penstemons have all been grown from seeds. They have been given the same care as other perennials. Most plants repay for extra attention and it might be if there were more time to provide special beds for them, to study the soil conditions, and to prevent all seed formation, that they would prove to be longer lived, their one weak point. Seed for the most part has been sown in late fall or early spring in a seed frame. There are some kinds that do not require freezing and thawing, but most of them that I have grown have responded well to such treatment. I am always surprised how early the seeds germinate in the seed frames in the spring. Some of the seeds are very fine and require scarcely any covering. If the soil has cracked or become rough from the effects of winter weather one must watch to see that roots are not exposed. A little sand sifted in the cracks and over the roughened surface may save precious seedlings.

I have grown other interesting species from seeds. Both *Penstemon nitidus* and *P. angustifolius* are dwarf, early blooming species and both are blue. *P. nitidus* is perhaps a little more choice of the two,—the blossoms seem bluer, the foliage richer and the habit of the plant a bit more compact and neat. *Penstemon albidus* I did not care for. There was nothing unusual about its foliage and the flowers were decidedly "dirty" in color. *P. acuminatus* is one of the prettier kinds, but did not prove as showy in my garden as descriptions had led me to expect. It grew to 15 inches in height, having narrow leaves and blue-purplish flowers with touches of lavender. It stayed with me only a few years and I failed to save seeds of it. *P. speciosus* is one I especially treasure for bouquets. The stems for a length of 18 inches are studded thickly with rich blue blossoms touched with purple. Instead of being round and round the stem, the blossoms are all on one side.

One that attracts people who are especially fond of blue is *Penstemon confertus*, blue form. The serrated leaves are a rich dark green, much

larger at the base of the plant than further up the stems. They make pleasing round bushes. The buds are soft, velvety and sparkling and open into clusters of small deep blue flowers. This one has proved quite persistent.

*P. torreyi* makes a cheery spot of color in the garden. Its brilliant red flowers are held well above the foliage, and the blooming period is especially long. *P. murrayanus* needs a place in the background to take care of its height. It must be carefully staked, for the tall brittle stems are easily twisted off by a playful wind. The succulent, blue-green opposite leaves join together round the stem to form a sort of cup. The blossoms resemble red honeysuckles, which explains at once its common name Honeysuckle Penstemon. The Texas Wild Flower bulletin says that wherever "soft soils, some shade, and moisture occurs, this species should be propagated." It grows to 6 feet or more tall and blooms gloriously in my garden with no extra attention except weeding and staking.

OLGA ROLF TIEMANN, Westboro, Mo.

### PENSTEMONS IN KANSAS

YEARS ago I grew three plants of *Penstemon eatoni* from seed sown in late fall. The plants grew beautifully and bloomed the first summer. Two or three Junes saw their slim, dark scarlet tubes drooping from the foot tall stems over a weathered old rock in the central Kansas rock garden, making a lovely unforgettable picture. The accepted height for this beard-tongue, I believe, is 18 inches, though it did not reach it in our garden. These three plants were killed, along with almost every thing else of value, by several years of the worst drouth we have ever known. They did not mature seeds, and I have never since been able to locate a source of supply. This is surprising considering its beauty and ease of culture.

Growing in colonies by the roadside or in open glades throughout the Ozarks one finds the beautiful "Ozark Cobaea." It has the usual *Penstemon cobaea* rosette of deep green glossy leaves, with many 18 inch stems of fine rosy-magenta flowers. The clusters are large as are also the individual flowers. The color sounds very unattractive but really is lovely, for it has a glow that few flowers equal. If I could have but one member of this grand genus I think this Ozark native would be my choice. These plants enjoy a long life and soon have a large family about them. The flower clusters last well and make a splendid cut flower. Of course as they grow older the number of stems to a clump increase until a fine old plant will be a picture of loveliness during its summer blooming. The leaves stay green all winter but require no mulching or attention. I know, for we tried them out for years in one of the most difficult winter climates to be found in the nation,—in central Kansas, with its sweeping, almost continual winds, unaccompanied by snow protection, and the temperature staying below zero for days and weeks at a time. The plants came through with flying colors every spring. When chancing to pass a colony of it in the Ozarks, its breath-taking sweep of color is certain to set the brakes on any flower lover's car. It is the easiest plant imaginable to transplant. The first time we saw it was one scorching hot summer when we were down from Kansas. I lifted several plants in full bloom, wrapped them in newspapers and carried them around for days in the back of the car. Every plant lived and bloomed beautifully the following summer.

MRS. H. P. MAGERS, Mountain Home, Ark.

## TWO PENSTEMONS CULTIVATED IN MONTANA

**G**ROWN for many years under the misnomer of "secundiflorus," *Penstemon unilateralis* has proved one of the most showy and dependable in my garden, growing up to three feet, with long dense spikes of lavender bells conspicuously veined with deeper colored lines, all facing the same way. This is one of the later blooming species—the latter part of June and well into July—in my garden, which is much later than many, as Montana often has a delayed spring. It has proved very adaptable, growing in the regular border without special coddling, in fact it volunteers generously all over the garden. Like all Penstemons, it dislikes wet feet, but that is the only point that needs special attention.

*Penstemon angustifolius* is a wholly dependable dwarf, which in early June covers itself with masses of the purest blue; there is a pinkish tinge in the bud, but the opened flowers are a clear rich color, without any lavender or pink at all. Its greatest fault, as I know it, has been its tendency to bloom itself to death. The young plants are hardy and easily grown, but it seems almost impossible to revive the old plants after their heavy blooming. The linear leaves show a distinct blue tinge, in winter almost purple blue.—MRS. WILLIAM HEBERT, Denton, Montana.

## A MONTANA GARDEN TREASURE

**P**ENSTEMON *rupicola alba* is in my opinion the loveliest of all Penstemons. It is low, semi-shrubby, and when well-grown, a compact mass of small, roundish, toothed leaves of a delicate apple-green color with an overlay of silver. The trumpet-flowers, fully an inch long, are of purest crystalline white. They make one think of silvery moonbeams and frost crystals; gossamer threads and fairies' wings. It was once my privilege to see a plant of *P. rupicola alba* a foot across in the fullest perfection of its blooming period. On that hot June day the sight of it was as refreshing as an iced drink.

Give it a light leafy soil with crushed rock, a slightly raised position, and small stones on the surface so that the wandering shoots can come up between them. Without such protection the woody shoots become dry and brittle, and soon the whole plant dies.—CLARA W. REGAN, Butte, Montana.

## PENSTEMON AMBIGUUS

**T**HE Sand Penstemon or Pink Plains Penstemon, as it is termed in Texas, is a native of the Dust-bowl country, and decidedly distinct from all other members of the genus. Like many other plants which grow under such soil and climatic conditions, the roots reach almost to China. Since it is impossible to dig plants without cutting off much of the deeper root system, then, establishment in the garden is a slow matter. Here the first year the plants produced no flowers at all, the second year only a few. But ultimately they developed solid mounds of bloom in late June and July.

Paleness in color may perhaps be considered a drawback in this species, my plants being white, faintly flushed pink, with deep rose throat and tube. However, they graciously made up for this by the profusion of bloom.

The stems arise from a woody base to a height of a foot or so; the leaves are linear or almost filiform. Instead of the usual funnellform corolla-tube, the orifice in this species is nearly closed, while the limb is spread-

ing. A special peculiarity is that the fifth stamen is sometimes anther-bearing. There seems to be some tendency to spread by rootstocks, but the species will surely never become invasive. Here, well north of its native range, it seems reliably winter-hardy.

Sometime, somewhere, a good pink form will no doubt be discovered and introduced. Such a plant need not feel hesitant about taking its place among the aristocrats of the rock garden.—A. F. PRIEST, Peru, Iowa.

## PENSTEMON ANGUSTIFOLIUS

**A**MONG the many attractive Beard-tongues this species is my personal favorite; I found it growing in the Nebraska sand-hills before I knew anything of this remarkable genus of plants. No wonder, then, when it came into bloom in the garden the following year, it impressed me as the most glorious blue flower I had ever seen. Since then I have grown several good blue species, but *P. angustifolius* is still No. 1 for me.

The plant has a woody base, from which come several stems, reaching a foot or more in height, depending on the soil and situation. It grows larger in the garden than in the wild, no doubt because of the richer and moister soil. The smooth leaves are long and narrow and have that enchanting hint of blue characteristic of various members of the genus. As to the flowers,—who could paint more beautiful word pictures than Reginald Farrer? Quoting from his English Rock Garden: "Forming an almost bushy mass of lovely blue-grey shoots from which later summer elicits spikes of ample blossom such as only the high gods, pillowed on the Empyrean, could have imagined—beginning gently in dreaming tones of lavender and rose, from which the sunlight of maturity stiffens the dawn-softness into clear coerulean tones that herald day, yet never arrive at its hard and shadowless certainties. Not even in *Omphalodes* is there any matching the tender yet assured magnificence of the pale azures deployed in time by *P. angustifolius*."

Then, in "My Rock Garden," Farrer lamented the inadequacy of our color vocabulary in describing the different color tones. A good seedling, in good health, he went on to say, is beaten by nothing in the garden as far as color goes. "The clear mild sweetness of its pale heavenliness is better even than the richer, heavier color of *Eritrichium nanum* or the more violent hard splendor of *Gentiana verna*." This is high praise indeed, especially when one considers the many beautiful plants his eyes had beheld and his pen described.

In the garden, *Penstemon angustifolius* is not so long lived as could be wished for, generally blooming two years and then departing. However, it is worth all the time and trouble required to keep it going. As a partial recompense for its short life, it produces a generous amount of seeds, which, if sown in late fall in a frame, or even merely scattered and scratched into the ground, will germinate like those of most weeds. So one never need be without young plants coming on to take the place of the old ones.

We grow this *Penstemon* here on an elevation in ordinary soil to which enough sand and gravel have been added to provide thorough drainage. In climates where the rainfall is heavy, the latter precaution is all-important; and crowding by larger plants which encourages accumulation of moisture in the air must also be carefully avoided.

Have you ever reached for the moon? Well, at least you can have a piece of the sky in *Penstemon angustifolius*.—A. F. PRIEST.

## PENSTEMON DISSECTUS

IT WAS about 10 years ago that I first found *Penstemon dissectus*. The plants had their seed pods developed, and when I showed the herbarium sheets I had prepared to Dr. John K. Small he said "You have here one of the rare plants of the world. It has only been collected a few times, and this is the first time the seed capsules have been seen by a scientist." Needless to say I was immensely interested, and returned soon again to its home in the Georgia pine-barrens at a time I hoped it would be in bloom. This visit was on April 24th, 1937. Although the pink-flowered orange-bearded *Penstemon australis* was in full bloom nearby, *P. dissectus* was still in bud, its height at the time being 18 to 24 inches. The plants grew in sandy peat near or beneath tall slender pines, so scattered as to produce a dappled shade.



BY EDGAR T. WHERRY

*Penstemon dissectus* is unique in its ferny leaves; the flowers are purple with white center. Mrs. Henry's.

*Penstemon dissectus* is of special interest because it is the only species of the genus that bears finely divided leaves,—almost like those of a fern. Only the leaves on the young basal shoots are undivided. In my opinion it is unquestionably the most beautiful of the eastern Penstemons. The rather large bright purple and white flowers are carried on stiff, slender stems. It has the added merits of spreading into clumps by stolons, of being evergreen, and of having a long life span.

The first clump I ever saw was growing in the open. The well-bronzed ferny-leaved shoots were crowded together forming a solid mass approximately seven feet long and three feet wide. Some 50 yards away I found another, less compact because in more shade. Its shoots pushed up through the pine needles at rather close intervals, creating a delightful effect. I stepped off this clump, apparently all one plant, and it measured 27 feet

in diameter. Walking on, fascinated, I found the ground fairly carpeted with the Penstemon, the largest mass being actually 126 feet long.

Two small clumps were brought to Gladwyne, and planted in acid soil on the south-facing hill slope, one in shade, the other in full sun. The latter unquestionably thrives the better. It has proved absolutely hardy here, surviving many sub-zero winters. Let us hope the time will come when this Penstemon will receive the attention from rock gardeners that it certainly deserves.—MARY G. HENRY, Gladwyne, Pa.

## EASTERN AND MIDLAND PENSTEMONS

APPROPRIATELY, most of the writings on rock garden Penstemons deal with western species, for these are endowed with the greater beauty. In the relatively humid climates under which our eastern rock gardens must



BY MRS. C. I. DE BEVOISE

*Penstemon hirsutus* is the eastern most native species  
it spreads rapidly into large clumps

be maintained, however, the arid-environment westerners are to say the least difficult. A review of the more notable of the thirty eastern and midland species may therefore be of interest to Penstemon enthusiasts.

Easternmost, as a native species, is *P. hirsutus*, a dweller on rocky or gravelly slopes from New England to Lake Michigan. Most of its clumps have flowers of dingy, unattractive hues, but good lavender, pink, and white-flowered individuals are occasionally found. It seeds freely and will soon fill up your rock garden if left alone.

In subacid rocky soil through the Appalachians and Piedmont, from Alabama to central Pennsylvania, occurs *P. canescens*. Its flowers are larger, more open in the throat, and more attractively colored lavender to lilac, than the preceding species. On wooded rocky slopes of the Blue



Ridge in western North Carolina and adjacent states grows the related *P. smallii*, with especially broad leaves and bracts, and showy rosy lilac flowers. It will tolerate more shade than most of the rock species, and also circumneutral, more or less limy soils.

Coming now to the midland states, several species grow in rocky soil in the limestone plateau country of Kentucky and Tennessee (though also occasionally escaping and becoming naturalized far beyond their native range). Most striking of these is *P. calycosus*, a rather tall leafy-stemmed plant with inch-long open-throated purple corollas. Curiously enough, as the species names indicate, this has extra long sepals while its lesser companion in the same area, *P. brevisepalus*, has especially short ones.

Still further west, the Ozark upland again offers rocky slopes, and here grow several noteworthy species. The giant-flowered *P. cobaea purpureus* has been mentioned elsewhere in this Bulletin; its paler-colored relative (ssp. *typicus*) ranges a bit further west, from Nebraska to Texas. Less striking, yet more suitable in size for the average rock garden are several sorts with narrowly tubular white or pale lilac flowers. The writer



BY EDGAR T. WHERRY

The white to pale lilac *Penstemon wherryi* has some rock garden promise. Photographed in temporary cultivation.

has seen three, *P. pallidus* (which by the way spreads eastward as a mild weed in other than rocky soils); *P. arkansanus*, which stays on its wooded mountain sides; and a restricted endemic named *P. wherryi*. This last, a dwarf plant with some rock garden promise, grew here for a time, but was killed out by something not ordinarily listed as fatal, namely nematodes!

Besides the species above enumerated, which favor rocky situations, the eastern-midland region supports a number of open woodland and meadow-dwellers. Commonest are *P. laevigatus* (the first representative of the genus discovered) with medium-sized purplish flowers; and the relative with which it has often been confused, the white-flowered *P. digitalis*, native to the states adjoining the Mississippi River, but now spreading as a weed over the eastern states, and not for the small rock garden.—E.T.W.

## LET'S VOTE ON AN EMBLEM

The subject of an official emblem for this Society has been considered by the Board of Directors from time to time, but no conclusion has as yet been reached. As we really need an emblem for use on stationery, medals or awards, etc., some action would seem desirable at this time.

In the early days of the Society the Short-spur Columbine was adopted informally. With the idea of starting off discussion, a note on "A new floral emblem" was inserted in the *Bulletin*, vol. 1, No. 3, p. 68, May-June, 1943. Three communications were received in response. The general consensus of opinion, as expressed in these contributions and in oral discussions presented by various members may be stated as follows:

The genus selected for our emblem should grow wholly or largely in North America. It should have native representatives in all or nearly all the States of the Union. And some of its members should be capable of being grown without special difficulty in rock gardens throughout the country. The following four genera agree more or less with these requirements:

Dodecatheon, perhaps 25 species in North America and 5 in Asia; here native to all but the New England States. Cultivation of a few easy.

Lewisia, about 20 species all North American, native from High Plains westward. Eastern gardeners may find them difficult.

Penstemon, between 150 and 200 species, all but one North American. One or more species native to every state but New Hampshire and Rhode Island. Some capable of cultivation anywhere.

Phlox, 60 species, all but one North American. One or more native to every state but Maine, New Hampshire, and Rhode Island. Several in general cultivation.

There is enclosed with this issue of the *Bulletin* a ballot for members to express their preference among these or other rock plant genera. If enough of these ballots are returned to the Secretary by September 15th, the result will be announced in *Bulletin* Vol. 4, No. 5.—E. T. W.

---

### The SECRETARY and his GARDEN



# SPECIALISTS IN ALPINES AND ROCK GARDEN PERENNIALS

## **saxton & wilson**

Successors to WM. BORSCH & SON  
GROWERS OF DISTINCTIVE HARDY PLANTS  
maplewood, oregon

### GREEN PASTURE GARDENS

2215 East 46th Street  
Seattle 5, Wash.

### REX D. PEARCE

Moorestown, New Jersey

### PARAMOUNT GARDENS

Plainfield, New Jersey

### WAKE ROBIN FARM

James Loder Park  
Home, Pennsylvania

### MAYFAIR NURSERIES

93 Highland Ave.  
Bergenfield, N. J.

### ZENON SCHREIBER

*Landscape Design*  
2100 East Ridgewood Ave.  
Paramus, N. J.

### CLOUD HILL NURSERY

DORETTA KLABER  
R.F.D. No. 1 Quakertown, Pa.  
On Penna. Route 663 between  
Geryville and Spinnerstown

### CARROLL GARDENS

Westminster, Maryland

### MITCHELL NURSERIES

Barre, Vermont

### CARL STARKER GARDENS

Jennings Lodge, Oregon

### UPTON GARDENS

Colorado Springs  
Colorado

### ISAAC LANGLEY WILLIAMS

Exeter, New Hampshire

### CLAUDE A. BARR

Prairie Gem Ranch  
Smithwick, S.D.

### SANDY LOAM

*Garden Lilies*  
North Springfield  
Vermont

### BOBBINK & ATKINS

*Nurserymen and Plantsmen*  
East Rutherford,  
New Jersey