

The New Mexico Botanist

Number 38

April 3, 2007

A Newsletter for the flora of New Mexico, from the Range Science Herbarium and Cooperative Extension Service, College of Agriculture and Home Economics, New Mexico State University.

In This Issue —

- Index to *The New Mexico Botanist* 1
- Amateur Botanists 6, 7
- Plant Reports 7

The New Mexico Botanist — Cumulative Index, Issues 1-38

Indexed here are scientific names, authors, and subjects for issues 1-38 of *The New Mexico Botanist* newsletter. Copies of the newsletters and of this index are available online at <http://cahe.nmsu.edu/nmcr> (or, do a search on “range science herbarium”), and take the link to the newsletter. The Cumulative Index will be maintained and updated online at that site.

<u>Scientific Names</u>	<u>Issue</u>
<i>Abronia nana harrisii</i>	24
<i>Abutilon</i>	32
<i>incanum pringlei</i>	2
<i>Acacia angustissima hirta</i>	30
<i>Acer grandidentatum sinuosum</i>	15
<i>Achnatherum nelsonii nelsonii</i>	37
<i>Acroptilon</i>	10
<i>Adenophyllum wrightii</i>	36
<i>Adolphia infesta</i>	21, 36
<i>Agalinus calycina</i>	15
<i>Agastache pallidiflora havardii</i>	16
<i>Agoseris heterophylla</i>	31
<i>Aira elegans</i>	8
<i>Aliciella triodon</i>	24
<i>Alisma subcordatum</i>	13
<i>Allium</i>	27
<i>Allowissadula holosericea</i>	4
<i>Alyssum alyssoides</i>	38
<i>Ammannia coccinea</i>	13
<i>Amsinckia menziesii</i>	33
<i>Amsonia tharpai</i>	13
<i>Anemone tuberosa texana</i>	2
<i>Antennaria corymbosa</i>	15
<i>dimorpha</i>	37
<i>Anulocaulis leiosolenus howardii</i>	14
<i>Aphanostephus ramosissimus ramosissimus</i>	35
<i>Arceuthobium</i>	33
<i>Arenaria hookeri</i>	7, 13
<i>Aristida purpurea perplexa</i>	2
<i>Arnica fulgens</i>	24
<i>latifolia</i>	32
<i>Artemisia pygmaea</i>	4, 19
<i>tridentata wyomingensis</i>	15
<i>Asclepias verticillata</i>	13
<i>Asplenium palmeri</i>	36
<i>Astragalus calycosus calycosus</i>	24
<i>cicer</i>	24
<i>cliffordii</i>	31
<i>crassicaarpus paysonii</i>	13
<i>eremiticus</i>	33
<i>flavus higginsii</i>	30
<i>heilii</i>	31
<i>nutriosus</i>	32

(Continued on page 2, Index)

Botanice est Scientia Naturalis quae Vegetabilium cognitioem tradit.

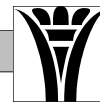
— **Linnaeus**



(Index, continued from page 1)

<i>preusii</i> <i>latus</i>	30	<i>Centaurea</i>	10
<i>Atriplex heterosperma</i>	11	<i>americana</i>	7
<i>pachypoda</i>	9	<i>diffusa</i>	4
<i>Baccharis havardii</i>	6	<i>rothrockii</i>	7
<i>Berberis vulgaris</i>	20	<i>Cerastium viscosum</i>	13
<i>Bernardia</i>	24	<i>Cercocarpus</i>	4
<i>Bertera incana</i>	4	<i>Chaenactis carphoclinia</i>	20
<i>Betula glandulosa</i>	37	<i>Chamaechaenactis scaposa</i>	24
<i>Boerhavia coulteri palmeri</i>	24	<i>Chamaesaracha edwardsiana</i>	20
<i>Bouchea prismatica brevirostra</i>	6	<i>Chamaesyce hirta</i>	24
<i>Bowlesia incana</i>	13	<i>villifera</i>	37
<i>Botrychium campestre</i>	37	<i>Chaptalia texana</i>	2
<i>echo</i>	29	<i>Chenopodium</i>	32
<i>Bouteloua rigidiseta</i>	37	<i>cycloides</i>	3, 13
<i>Brassica napus</i>	13	<i>rubrum humile</i>	31
<i>rapa</i>	3	<i>Chloris submutica</i>	4
<i>tournefortii</i>	6	<i>Chrysothamnus</i>	30, 36
<i>Brickellia parvula</i>	13	<i>Ciclospermum leptophyllum</i>	13, 15
<i>veronicifolia</i>	3	<i>Cinna latifolia</i>	29
<i>Briza maxima</i>	29	<i>Cirsium arizonicum rothrockii</i>	33
<i>minor</i>	8	<i>chuskaense</i>	24
<i>Bromus sterilis</i>	6	<i>ochrocentrum martinii</i>	14
<i>Buddleja scordioides</i>	13	<i>texanum</i>	31
<i>Bupleurum americanum</i>	10	<i>Cladium californicum</i>	26
<i>Calochortus</i>	16	<i>Cleome multicaulis</i>	22
<i>flexuosus</i>	13	<i>Cleomella obtusifolia</i>	35
<i>Camelina rumelica</i>	38	<i>palmerana</i>	4
<i>Camissonia parvula</i>	24	<i>Colutea arborescens</i>	35
<i>walkeri</i>	24	<i>Commicarpus scandens</i>	13
<i>Campanula rapunculoides</i>	15	<i>Conyza bonariensis</i>	21
<i>Cannabis sativa</i>	13	<i>Corallorhiza maculata occidentalis</i>	7
<i>Caragana arborescens</i>	31	<i>striata vreelandii</i>	7
<i>Cardamine hirsuta</i>	8	<i>Corispermum americanum rydbergii</i>	3
<i>Carex albonigra</i>	20	<i>Coronilla varia</i>	13
<i>angustior</i>	15	<i>Cotula australis</i>	11
<i>bebbii</i>	32	<i>Croton monanthogynus</i>	36
<i>brunnescens</i>	25	<i>Crypsis schoenoides</i>	31
<i>capitata</i>	32	<i>Cryptantha</i>	8
<i>chihuahuensis</i>	26	<i>flavocolata</i>	36
<i>conoidea</i>	25	<i>nevadensis</i>	35
<i>deweyana</i>	33, 37	<i>oblata</i>	6
<i>diandra</i>	12	<i>Cucurbita pepo</i>	24
<i>egglestonii</i>	28	<i>Cuscuta applanata</i>	13
<i>garberi</i>	32	<i>cuspidata</i>	13
<i>geyeri</i>	15	<i>warneri</i>	15
<i>illota</i>	24	<i>Cymopterus purpurascens</i>	15
<i>jonesii</i>	15	<i>terebinthinus</i>	24
<i>lativena</i>	22	<i>Cynosurus echinatus</i>	37
<i>macloviana</i>	25	<i>Cyperus bipartitus</i>	7
<i>microdonta</i>	29	<i>flavicomus</i>	13
<i>muriculata</i>	10	<i>rotundus</i>	13
<i>phaeocephala</i>	24	<i>strigosus</i>	4
<i>planostachya</i>	14	<i>Dalea compacta</i>	15
<i>pyrenaica</i>	34	<i>Datura</i>	30
<i>rosea</i>	37	<i>Daucosma laciniata</i>	11
<i>sprengelii</i>	15	<i>Descurainia pinnata intermedia</i>	24
<i>Cardamine cordifolia incana</i>	37	<i>Desmanthus leptolobus</i>	28
<i>pennsylvanica</i>	24	<i>Desmodium procumbens</i>	28
<i>Cardaria pubescens</i>	25	<i>Dianthus armeria</i>	13
<i>Carduus acanthoides</i>	15	<i>Didymodon anserinocapitatus</i>	6
<i>Carum carvi</i>	15	<i>Diodia teres angustata</i>	13
<i>Castilleja scabrida</i>	24	<i>teres setifera</i>	2
<i>Catalpa speciosa</i>	24	<i>Draba albertiana</i>	38
<i>Catapodium rigidum</i>	8	<i>grayana</i>	37

(Continued on page 3, Index)



(Index, continued from page 2)

<i>spectabilis</i>	15	<i>Heuchera hallii</i>	37
<i>Eleocharis bella</i>	4	<i>Hexalectrix revoluta</i>	14
<i>geniculata</i>	13	<i>spicata arizonica</i>	7
<i>Elymus villosus</i>	37	<i>Hieracium crepidospermum</i>	13
<i>Epilobium lactiflorum</i>	4	<i>Hordeum vulgare</i>	22
<i>palustre</i>	24	<i>Huperzia lucidula</i>	4
<i>Equisetum nelsonii</i>	37	<i>Hutchinsia procumbens</i>	31
<i>Eragrostis frankii</i>	19	<i>Hymenoxys helenoides</i>	24
<i>Ericameria nauseosa turbinata</i>	24	<i>Hypericum perforatum</i>	15
<i>parryi affinis</i>	19	<i>Hypoxis hirsuta</i>	4
<i>Erigeron abajoensis</i>	31	<i>Iberis umbellata</i>	13
<i>annuus</i>	13	<i>Ipomopsis aggregata aggregata</i>	24
<i>argentatus</i>	37	<i>longiflora neomexicana</i>	21
<i>compactus consimilis</i>	24	<i>Isatis tinctoria</i>	4
<i>eatonii</i>	24	<i>Juglans nigra</i>	37
<i>engelmannii</i>	24	<i>Juncus hallii</i>	12
<i>nivalis</i>	36, 37	<i>Lactuca biennis</i>	37
<i>utahensis</i>	37	<i>Lagurus</i>	31
<i>Eriogonum clavellatum</i>	24	<i>Lappula echinata</i>	13
<i>longifolium lindheimeri</i>	14	<i>Lapsana communis</i>	37
<i>sarahiae</i>	31	<i>Lathyrus</i>	25
<i>villiflorum</i>	25	<i>brachycalyx</i>	25
<i>Eriophyllum lanosum</i>	13	<i>pauciflorus utahensis</i>	24
<i>Erysimum cheiranthoides</i>	24	<i>venosus</i>	26
<i>Erythronium grandiflorum</i>	2	<i>Lechea tenuifolia</i>	14
<i>Euphorbia cyathophora</i>	4, 19	<i>Lemna turionifera</i>	15
<i>lathyris</i>	34	<i>Leontodon taraxacoides</i>	19
<i>myrsinites</i>	20	<i>Lepidium latifolium</i>	13
<i>odontadenia</i>	13	<i>montanum montanum</i>	24
<i>peplus</i>	4	<i>ramosissimum bourgeauanum</i>	37
<i>Fendlerella</i>	37	<i>Lesquerella ludoviciana</i>	24
<i>Festuca brachyphylla coloradensis</i>	13	<i>navajoensis</i>	14
<i>calligera</i>	13	<i>pruinosa</i>	16
<i>earlei</i>	13	<i>Leymus cinereus</i>	18
<i>trachyphylla</i>	13	<i>racemosus</i>	37
<i>Forestiera shrevei</i>	14	<i>Ligustrum vulgare</i>	15
<i>Fraxinus anomala</i>	3	<i>Lindernia dubia</i>	24
<i>pennsylvanica</i>	24	<i>Linum subteres</i>	24
<i>Gamochaeta rosacea</i>	30	<i>Lobularia maritima</i>	13
<i>stagnalis</i>	32	<i>Loeflingia squarrosa</i>	35
<i>Geum triflorum</i>	37	<i>Lonicera bella</i>	15
<i>Gilia capitata</i>	24	<i>tatarica</i>	24
<i>ophthalmoides</i>	24	<i>Lupinus argenteus argentatus</i>	15
<i>Glaux maritima</i>	16	<i>lepidus utahensis</i>	24
<i>Gleditsia triacanthos</i>	13	<i>Lycopodium clavatum</i>	4
<i>Gnaphalium leucocephalum</i>	6	<i>Machaeranthera gypsophila</i>	8
<i>Grayia spinosa</i>	24	<i>Malacothrix glabrata</i>	4
<i>Grimmia americana</i>	31	<i>sonorae</i>	33
<i>Grindelia laciniata</i>	13	<i>stebbinsii</i>	33
<i>Gypsophila paniculata</i>	31	<i>Matthiola bicornis</i>	13
<i>scorzonerifolia</i>	33	<i>Mentzelia conspicua</i>	14
<i>Hackelia ursina pustulosa</i>	4	<i>humilis guadalupensis</i>	14
<i>Hedyotis nigricans papillacea</i>	3	<i>marginata</i>	7
<i>Hedypnois cretica</i>	11	<i>todiltoensis</i>	35
<i>Helianthus maximiliani</i>	24	<i>Menyanthes trifoliata</i>	10
<i>Helictotrichon hookeri</i>	28	<i>Mertensia fusiformis</i>	35
<i>Hesperis matronalis</i>	15	<i>lanceolata</i>	35
<i>Heteranthera rotundifolia</i>	7	<i>Microthelys rubrocallosa</i>	34, 35

(Continued on page 4, Index)

Botany is the natural science that transmits the knowledge of plants.

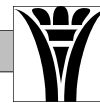
— *Linnaeus*



(Index, continued from page 3)

<i>Mimulus eastwoodiae</i>	24	<i>Potentilla</i>	16
<i>primuloides</i>	34	<i>fissa</i>	37
<i>Minuartia macrantha</i>	35	<i>Prenanthes exigua</i>	6
<i>Mitella pentandra</i>	34	<i>Prunella vulgaris hispida</i>	37
<i>Momordica balsamina</i>	4	<i>Prunus armeniaca</i>	31
<i>Monarda humilis</i>	28	<i>persica</i>	37
<i>Muhlenbergia arsenei</i>	36	<i>Pseudognaphalium jaliscense</i>	21
<i>eludens</i>	21	<i>luteoalbum</i>	21
<i>Myriophyllum aquaticum</i>	13, 21	<i>Pyracantha coccinea</i>	12
<i>verticillatum</i>	7	<i>Pyrus communis</i>	13
<i>Neckera complanata</i>	31	<i>Ranunculus alismifolius montanus</i>	37
<i>Neoparrya lithophila</i>	37	<i>repens</i>	37
<i>Nepeta cataria</i>	12	<i>Rayjacksonia annua</i>	13
<i>Nymphaea mexicana</i>	20	<i>Rorippa alpina</i>	38
<i>Oenothera caespitosa caespitosa</i>	24	<i>palustris</i>	38
<i>pallida trichocalyx</i>	13	<i>sylvestris</i>	37
<i>triloba</i>	15	<i>Rosa manca</i>	24
<i>Opuntia chihuahuanaensis</i>	4	<i>multiflora</i>	24
Orchidaceae	14	<i>Rotala ramosior</i>	24
<i>Orobanche corymbosa</i>	24	<i>Rudbeckia laciniata</i>	37
<i>Osmorrhiza longistylis</i>	15	<i>Rumex pulcher</i>	7, 13
<i>Ostrya knowltonii</i>	36	<i>stenophyllus</i>	33
<i>Packera obovata</i>	15	<i>Sabatia angularis</i>	13
<i>Panicum alatum alatum</i>	28	<i>Saccharum ravennae</i>	15
<i>alatum minus</i>	28	<i>Salix arizonica</i>	2, 3
<i>Parkinsonia aculeata</i>	13	<i>bonplandiana</i>	22
<i>Paronychia depressa</i>	7	<i>boothii</i>	13
<i>pulvinata</i>	33	<i>brachycarpa</i>	2
<i>Pectis cylindrica</i>	13	<i>fragilis</i>	22
<i>Pectocarya heterocarpa</i>	13	<i>taxifolia</i>	4
<i>Pedicularis bracteosa paysoniana</i>	31	<i>wolfii</i>	24
<i>Pennisetum villosum</i>	37	<i>Salsola</i>	12
<i>Penstemon</i>	9	<i>collina</i>	4
<i>campuanulatus</i>	11	<i>paulsenii</i>	16
<i>cobea</i>	9	<i>Salvia texana</i>	5
<i>comarrhenus</i>	9	<i>Salvinia minima</i>	13
<i>deaveri</i>	9	<i>Saxifraga hirculus</i>	35
<i>eatonii</i>	24	<i>Schiedeella arizonica</i>	18
<i>glaber alpinus</i>	37	<i>Sclerocactus cloveriae brackii</i>	2
<i>ophianthus</i>	7	<i>Scirpus pendulus</i>	13
<i>pachyphyllus</i>	24	<i>Secale cereale</i>	22
<i>pulchellus</i>	11	<i>Senecio amplexens holmii</i>	4
<i>rostriflorus</i>	24	<i>cliffordii</i>	31
<i>spinulosus</i>	12	<i>integerrimus</i>	4
<i>virgatus asa-grayii</i>	9	<i>millelobatus</i>	32
<i>Phacelia cryptantha</i>	34	<i>neomexicana toumeyii</i>	18
<i>sivinskii</i>	35	<i>quercetorum</i>	18
<i>Philadelphus</i>	13	<i>serra admirabilis</i>	24
<i>Phoradendron</i>	16, 33	<i>Silene latifolia alba</i>	15
<i>californicum</i>	3	<i>Silphium laciniatum</i>	28
<i>Physalis acutiflora</i>	38	<i>Simsia lagascaeformis</i>	22
<i>Physaria newberryi yesicola</i>	14	<i>Solanum carolinianum</i>	25
<i>Phytolacca americana</i>	12	<i>dimidiatum</i>	19, 25
<i>Piptatherum pungens</i>	37	<i>dulcamara</i>	24
<i>Plantago</i>	18	<i>Solidago</i>	11
<i>bigelovii</i>	6	<i>capulinensis</i>	36
<i>wrightiana</i>	5	<i>lepida</i>	38
<i>Poa pratensis alpigena</i>	19	<i>speciosa pallida</i>	4
<i>Polygonum aubertii</i>	10	<i>Sparganium angustifolium</i>	15
<i>Polypogon maritimus</i>	31	<i>emersum</i>	15
<i>Potamogeton alpinus</i>	15	<i>Spermolepis inermis</i>	13
<i>foliosus macellus</i>	13	<i>Sphagnum fimbriatum</i>	24
<i>richardsonii</i>	19	<i>Spiranthes parasitica</i>	15

(Continued on page 5, Index)



(Index, continued from page 4)

<i>Stanleya pinnata integrifolia</i>	38	Jercinovic, E.	30, 34, 37
<i>viridiflora</i>	15	Johnson, S.	25, 26
<i>Stellaria crassifolia</i>	24	Keller, C.F.	11
<i>Stevia salicifolia</i>	37	Lee, R.D.	10
<i>Stipa arida</i>	15	McGrath, J.	15
<i>speciosa</i>	15	Mygatt, J.	4, 14
<i>Strophostyles helvola</i>	31	Neal, P.	6
<i>leiosperma</i>	31	Nelson, B.E.	33
<i>Suaeda occidentalis</i>	24	O'Kane, S.L.	24
<i>Swertia albomarginata</i>	24	Palmer, M.W.	6
<i>Symphoricarpos</i>	33	Peterson, R.S.	15, 16, 30, 32, 33
<i>Symphotrichum campestre</i>	24	Raven, P.H.	30
<i>ciliatum</i>	11	Reeves, L.M.	8
<i>ericoides pansum</i>	24	Roalson, E.H.	7
<i>porteri</i>	13	Sainty, G.R.	15
<i>Symphytum officinale</i>	12	Silva, P.	7
<i>Syringa vulgaris</i>	37	Sivinski, R.	8, 18, 26, 27, 29, 35, 37
<i>Talinum</i>	20	Spellenberg, R.	5, 19, 22, 25, 29, 32
<i>parvulum</i>	24	Stewart, R.R.	36
<i>Taraxacum scopulorum</i>	15	Todsén, T.	14, 23
<i>Tetraneuris acaulis nana</i>	24	Turner, B.	10
<i>scoposa villosa</i>	13	Wade, G.L.	6
<i>Thelypodium laxiflorum</i>	38	Weber, W.A.	38
<i>Thymophylla tenuiloba tenuiloba</i>	31	Wheeler, Q.	30
<i>Tillaea aquatica</i>	7	Wilson, E.O.	30
<i>Torilis arvensis</i>	33	Worthington, R.D.	6
<i>Trifolium procumbens</i>	13		
<i>Triglochin concinna debilis</i>	24	Subjects	
<i>Triticosecal</i>	22	Archer, W.A.	33
<i>Triticum aestivum</i>	22	Barneby, R.C.	19
<i>Valeriana sorbifolia</i>	6	Brandege, T.S. & M.K.	16
<i>Verbascum virgatum</i>	13	Bigelow, J.M.	26
<i>Verbena gracilis</i>	6	Botanists, amateur	38
<i>Vernonia noveboracensis</i>	15	how they died	36
<i>Veronica arvensis</i>	13	Conservation	21
<i>Vicia</i>	26	Dissertations	2
<i>Vinca major</i>	19	Exotic plants	17
<i>Viola adunca bellidifolia</i>	32	Floras, standards for	6
<i>rafinesquii</i>	13	Frontera	23
<i>rydbergii</i>	24	Gambel, W.	30
<i>Vitex agnus-castus</i>	15	Greene, E.L.	34
<i>Zygadenus mogollonensis</i>	2	Gymnosperms	22
		Havaas, J.	38
		Herbaria citations	14
		Herbaria of New Mexico	2
		Herbarium NMC	5
		Herbarium NMCR	3
		Herbarium SJNM	8
		Herbarium UTEP	6
		Herbarium UNM	4
		Hershey, A.L.	23
		Identification	15
		Index, cumulative	38
		Native plants	23
		New Mexico flora, statistical summary	28
		collection history	37
		Orthography and nomenclature	7
		San Juan Basin	24
		Santa Rosa wetlands	29
		Suckley, George	36
		Taxonomy	30
		Theses	2
		Warnock, B.H.	10
Authors			
Alexander, P.	35		
Allred, K.W.	3, 7, 10, 12, 16, 22, 23, 24, 25, 26, 28, 30, 32, 33, 38		
Bleakly, D.	2, 9, 16, 29		
Clifford, A.	24		
Cox, G.W.	17		
Cox, P.A.	21		
Denham, R.A.	4		
Dodson, C.	2		
Ertter, B.	33		
Ferguson, D.J.	20		
Forbes, A.C.	12		
Frazier, C.K.	13, 16		
Gould, S.J.	23		
Hartman, R.L.	33		
Heil, K.D.	8, 24		
Hosking, J.R.	15		
Hubbard, J.P.	11, 12		
Hufford, L.	37		
Jacobs, S.W.L.	15		





JOHAN HAVAAS, 1864-1956

Bill Weber

Museum, MCOL E190B, CB 265, University of Colorado, Boulder, CO 80309

[Originally appearing in Botanical Electronic News No. 354, 22 Dec 2005, used by permission. The message about amateur botanists is just as important as the advertisement for the book; see related article on page seven. — ed.]

Do we need to be reminded that the serious amateur plant collector has rarely been given proper credit for his or her work? Peter Raby, in his book on Alfred Russel Wallace, quotes (page 85) Edward Newman's presidential address to the Linnean Society of London in 1854:

"The monographer cannot say to the collector, I have no need of you; the very admission of such a thought is a stumbling-block. . . I wish to be understood as applying this last observation especially and emphatically to the case of the actual collector; to the man who, in whatever station of life, devotes his time, by night and by day; at all seasons, in all weathers; at home and abroad, to the positive capture and preservation of those specimens which serve as the objects for all our observations; he is the real labourer in the field, and if we would keep the lamp of our science constantly burning, it is to him alone that we can look for fuel to feed its flame. . . . Such men do great, permanent and continual good; they tender our science an unquestionable service, and their motives are no more to be called in question than those of the artist or the author, who receives the just reward for his well-directed labours."

A new book detailing in words and excellent color and black and white illustrations the life and work of a quiet, untraveled, Norwegian amateur botanist, has appeared that ought to bring great joy to those of us who have hoped that, at long last, the collector would be given proper appreciation. Here was a man who not only collected vascular plants, lichens, and bryophytes, but taught himself the languages in which he could correspond with the leaders in northern European plant taxonomy. Although little known about him outside of Norway save for his published lichen exsiccata of Norwegian lichens, his collections are highly regarded in the Scandinavian herbaria.

Sevrin Kjerland & Hans S. Haugse. 2005. *Johan Havaas, fjellbonde og vitenskapsmann*. University of Bergen, Bergen Museum, Bergen, Norway. 206 p., illustrations in black-and-white and color. 28.5 cm x 20.5 cm. ISBN 82-303-0396-7 [Cloth-bound] Price: Norw kr. 395.00 + 280.- postage to North America. Available from: Universitetet i Bergen, Bergen Museum, Publikumsseksjonen, Harald Harfagres g 1, 5020 Bergen, Norway, <http://bergenmuseum.uib.no/>

"High up on a mountain in the Granvin district in Hardanger lived our country's most distinguished scientist in his environment. Who on earth could believe this? The little mountain farm and its old house hardly looks scientific, much less does its little slight-built man!" — Bergen Aftionblad 10 April 1937 [translated WAW]

[This is] "the story of a highly competent, devoted scientist who achieved international fame, but never that recognition which expresses itself in economic security. His life was that of a western Norwegian small farmer, on a mountain farm besides. It is a hard fight to wrestle a kind of livelihood from a poor soil and under difficult circumstances. That Johan Havaas was able, under these circumstances, to teach himself not only the basic facts of cryptogamic botany, but also the foreign languages he needed for his studies, is an almost unbelievable achievement. It is with bitterness one contemplates the wasted abilities, and sadly hopes that today society has provided possibilities for scientific

talent to express themselves under better circumstances. On the other hand, due to the inevitable restrictions on his work, Havaas concentrated on a very small area which he studied year after year at all seasons. There is hardly any part of the world of similar size the cryptogamic flora of which has been studied as intensively as the western part of Granvin, and Havaas' three papers, the earlier ones on hepatics and on lichens, and the present one on mosses, together represent an unsurpassed fund of knowledge of a small district." — Knut Faegri, October, 1960.


This beautiful book was made possible by a number of Havaas' neighbors in Granvin, and between them, plus financial help of the local newspapers and historical societies, plus the cooperation of several botanists from the University of Bergen, including Per Joergensen, Tor Toensberg and Geir Flatboe. The result is one of the most lovely, thorough, compassionate and deserved tributes to, of all things, an amateur botanist! There is an especial irony in this, for we are beginning to see that the future of non-specialized field botany is disappearing from our institutions of higher education and must be taken on by the serious amateurs of the future, bless them!

The book's cover is a tapestry of bark and rock lichens - notably *Xanthoria elegans*, *Dimelaena oreina*, and the map lichen (in Norwegian "kart-lav") *Rhizocarpon geographicum*, framing a fine oil painting of Havaas by Lars Osa. The chapter headings include a foreword, history of Havaas' family and ancestors, his childhood, youth, poetry, his own descriptions of his early botanizing after having done the farm chores, and military service. The design and layout of the work includes end-papers showing the map of the Granvin area, excellent choices of type faces, placement of illustrations, and insets of special charts. These details alone would justify a prize for bookmanship.

Havaas' lichenological beginnings involved contacts with all of the important lichenologists of the day: Blytt, Norman, Norlin, Nylander, Lang, Th. Fries, Forsell, Magnusson, Malme, Lyng, and Kaalaas. He obtained stipends over the years with Bergens Botanical Museum, and prepared his excellent *Lichens Exsiccatae Norvegiae*, which one still finds cited in many current papers. He also prepared a manuscript of the liverwort flora of Norway and made extensive collections of vascular plants and fungi as well. His collection of *Flora Danica* in bound volumes occupy a large bookshelf at the Bergen Museum.

The handsomely formatted text is in Norwegian, except for letters in German and English. No matter, the book is a joy for anyone to behold, whatever language one comprehends. There are illustrations on almost every page, many of them photographs taken by Havaas himself. One can see Havaas' farm, houses, family, genealogical records, colleagues, his microscopes, vasculum (and his many pairs of spectacles!), documents and letters concerning important events in his life, his statement of his religious philosophy, correspondence with other botanists, color photographs of many of his specimens, newspaper tributes, and a copy of the document awarding him the gold medal from King Haakon.

Final chapters present the complete history, including all of the correspondence between Bill Culberson and Jens Lillegraven, dealing with the ultimate disposition of Havaas' private lichen herbarium to Duke University, and tributes from around the world in honor of his 90th birthday and, of course, on the occasion of his death at age 92.

The Havaas farm and its buildings have been preserved as an educational museum and shrine containing his personal effects, library, and cases of visible plant specimens that are better suited to such display than the packeted herbarium specimens suitable for research museums. There can be no grander tribute to the importance to science of a dedicated amateur than this handsome book on Johan Havaas. The fact that the project was undertaken by his farmer friends makes the book a very special one. 



Plant Distribution Reports

New records and significant distribution reports for New Mexico plants should be documented by complete collection information and disposition of a specimen (herbarium). Exotic taxa are indicated by an asterisk (*), endemic taxa by a cross (+).

— Ken Heil [San Juan College, 4601 College Blvd., Farmington, NM 87402]

Draba albertina Greene (Brassicaceae, slender whitlow grass): San Juan County: Navajo Nation, Chuska Mts, Southwest of Tohnitsa Lookout, N36°08'11" W108°54'19", 9000 ft, in moist soil with grasses near pond margin, 2 Jun 1997, O'Kane & Hedin 3871 (SJNM). [Determined by Ihsan A. Al-Shehbaz.]

Solidago lepida A.P. de Candolle var. *salebrosa* (Piper) Semple (Asteraceae, western goldenrod): San Juan County: Aztec, north of US 550, near the Animas River, T30N R11W Sec9, alluvium, riparian site, 5640 ft, Sep 1987, Rich Fleming 422 (SJNM); Sandoval County: Jicarilla Apache Reservation, ca. 4 miles west of turnoff to Dulce at Trading Post, up a canyon south of bridge, riparian community, N36°10'55" W107°20'52", 6812 ft, 29 Sep 2000, Ken Heil & Arnold Clifford 15949 (SJNM); Rio Arriba County: ca. 1 mi SE of the San Juan County and Rio Arriba County line, bench above the Largo drainage, T27N R7W Sec31, riparian habitat, 6200 ft, 28 Aug 1999, Ken Heil 13871 (SJNM). All three vouchers annotated by G. Nesom. [This further documents with localities this variety, first reported in volume 20, Flora of North America, by Semple & Cook.]

****Alyssum alyssoides*** Linnaeus (Brassicaceae, alyssum): San Juan County: City of Farmington, The Bluffs Recreation Area, sandstone outcrops, 24 Apr 1985, J. Mark Porter 1001 (SJNM). [Det. by S. O'Kane]

Camelina rumelica Velenovský (Brassicaceae, graceful false-flax): San Juan County: About 3.5-4 mi south of Lybrook, San Jose Fma, outcropping with locally derived sand coarse soils, 7300 ft, pinyon-juniper woodland community, T23N R7W Sec35, 7 May 1995, Arnold Clifford 95-132 (SJNM). [Det. by S. O'Kane]

Rorippa alpina (S. Watson) Rydberg (Brassicaceae, alpine yellow-cress): McKinley County: Navajo Nation, about 5 mi west of Tohatchi along Red Willow Wash, intermittent stream, riparian community, 35°51'57"N 108°46'06"W, 6575 ft, 25 Aug 2000, Ken Heil 15381 (SJNM); Rio Arriba County: Chromo Mountain, Salso Gomez Ranch, up an abandoned timber cutting road near

cabin, white fir, aspen, & Douglas-fir, 36°58'23"N 106°44'19"W, 8700 ft, 9 Sep 2000, Ken Heil & Wayne Mietty 15669 (SJNM); San Juan County: Navajo Nation, 4.6 mi N of Narbona Pass on Navajo Road 7170, small pond, ponderosa pine & Douglas-fir, 36°07'18"N 108°54'35"W, 8700 ft, 2 Sep 2000, Ken & Marilyn Heil 15577 (SJNM). [all det. by S. O'Kane]

Rorippa palustris (Linnaeus) Besser var. *palustris* (Brassicaceae, bog yellow-cress): McKinley County: Navajo Nation, north of Thoreau and east of State Hwy 7371, Todilto Limestone, windswept pinyon-juniper, 13 Jun 1996, Ken Heil 9991 (SJNM); Rio Arriba County: 0.75 mi from cabin up Chromo Mountain on an old logging road, along an intermittent creek and in shady areas, white fir, aspen, Douglas-fir, 36°56'15"N 106°44'16"W, 8640 ft, 7 Jul 2000, Ken Heil & Wayne Mietty 15129 (SJNM); San Juan County: Santa Rosa Bureau of Land Management tract east of the town of Blanco, access through private property from US 64, side creek in arroyo at the NW corner of the tract, 29 May 1998, Tim Reeves 9606 (SJNM). [all det. by S. O'Kane]

Stanleya pinnata (Pursh) Britton. var. *integrifolia* C. James (Brassicaceae, prince's plume): San Juan County: Navajo Nation, US 160 near mile Marker 9, about 11 mi W of Shiprock, about 0.5 mi east of Red Wash, Mancos clay hills, desert scrub with Atriplex and Eriogonum, 36°47'54"N 108°55'26"W, 4975 ft, 31 Aug 2001, Ken Heil & Wayne Mietty 17682 (SJNM). [Det by S. O'Kane]

Thelypodium laxiflorum Al-Shehbaz (Brassicaceae, drooping thelypody): San Juan County: Carrizo Canyon, about 1 mi SE of jct with Largo Canyon, riparian site with *Typha*, *Cyperus* & *Phragmites*, 5900 ft, 22 Aug 1998, Ken Heil, Matt Heil, & Wayne Mietty 1250 (SJNM). [Det by S. O'Kane]

— Patrick Alexander [Biology Dept., New Mexico State University, Las Cruces, NM 88003]

Physalis acutiflora (Miers) Sandwith (Solanaceae, pointed groundcherry): Dona Ana County: Calle del Norte, ca. 1 km west of NM hwy 128, north side of Mesilla, in clay soil of onion field, 18 July 2000, R.W. Spellenberg 13087 (NMC).

Ed. Note: The use of the term "parabotanist" to refer to an amateur botanist seems to have its recent origin at the San Diego Natural History Museum, thence spreading to Arizona (a single report), and now appearing in New Mexico botanical circles. Without offence to any of my eminent, capable, and kind colleagues, I join this plea by Mark Hinelein for the re-enthroning of the venerable and dignified title, "amateur botanist." See also Bill Weber's article on page six.

Botany Project Noble; 'Parabotanist' Label Is Not

Mark Hinelein

July 30, 2005, North County Times, San Diego, California

I thought I heard Tom Fudge, host of KPBS radio's morning talk show "These Days," say that the San Diego Natural History Museum was looking for a pair of botanists to collect field data for a new plant atlas. That can't be right, I thought. It will take more than a couple of botanists to survey all the plants in the county.

After all, San Diego County is reputed to have more plant diversity than any other county in the contiguous United States. This a political distinction, of course, having more to do with the way our boundaries were drawn than with the exceptional character of our plant habitats.

Even so, a pair of botanists to survey many hundreds of our region's plants?

I had been listening to "These Days" while attending to other business. Ceasing to split my attention this way, I listened more closely and quickly learned that I had misinterpreted what I had heard.

The San Diego Plant Atlas Project was looking for people to work as "parabotanists."

If "parabotanist" meant what I thought it did, this was beginning to make sense, in a way. And in another way, it wasn't.

After a few minutes of listening with full attention, I learned what I should already have known by reading Ruth Marvin Webster's story on the parabotanist program in the North County Times: The project seeks committed amateurs to extend our knowledge of the county's plant life.

Amateurs.

The project calls them parabotanists, borrowing the prefix "para-" to devise a euphemism for a category of training and activity similar to that of a paralegal or a paramedic: parabotanist. Not quite a botanist. But not an amateur botanist, either. That's the part that still didn't make sense, and it made me just a bit sad.

Before I explain the sadness, though, I have to be clear that

(Continued on page 8, Parabotanist)



Publication and Subscription Information

"The New Mexico Botanist" is published irregularly (as information accrues) at no charge. You may be placed on the mailing list by sending your name and complete mailing address to the editor:

Kelly Allred
The New Mexico Botanist
MSC Box 3-I
New Mexico State University
Las Cruces, NM 88003
or
Email: kallred@nmsu.edu

Available on-line at <http://spectre.nmsu.edu/dept/welcome.html?rsh>

Kelly Allred

(Parabotanist, continued from page 7)
the project itself is a noble one.

Losses and fragmentation of habitats, caused by the industrious unfolding of human dreams and aspirations, are changing the conditions for plant life in the county, just as they are changing environments the world over. Changes in habitat brought about by acute global climate change also makes for changing habits.

It is difficult to monitor those changes ---- or halt them, when they can and should be stopped -- with any degree of rigor if you do not have a full catalog of the plants that grow in a region, or if you don't know where they currently grow or have grown in the past.

The San Diego Plant Atlas Project will make a significant dent in our collective ignorance of the region's environment.

So it may be churlish of me to complain of the sadness I feel about "parabotanist" when good deeds are afoot. The historian and activist in me cannot help it.

Benjamin Franklin was an amateur physicist. Charles Darwin was an amateur natural historian. Charles Lyell, whose "Principles of Geology" provided the foundation for progress in the earth sciences, was an amateur; he was trained in the legal profession.

The sciences developed a sense of professionalism in the latter half of the 19th century, but not without acknowledging the competent work of amateur scientists in a variety of fields.

In astronomy, amateurs are responsible for discovering most of the comets, novae and supernovas that appear in the night skies every year. Amateurs monitor the changing brightness of variable stars and report their findings to the American Association of Variable Star Observers, the AAVSO.

Birders collected most of the data for the San Diego Natural History Museum's Breeding Bird Atlas for the county. They did not insist on being known as "paraornithologists." "Birders," or the more old-fashioned "bird watchers," was good enough.

For decades, amateur botanists have learned to identify plants, native and otherwise, and to call them by a variety of names, including their scientific names. When they have gone out into the field to collect plants, or simply to admire plants in the landscape, amateur botanists have called their pastime "botanizing." Not parabotanizing.

Do labels matter? They do to botanists.

Let botanists be botanists. Those among them without professional credentials will proudly proclaim their amateur status.

They have history on their side.



*The New Mexico
Botanist*

COOPERATIVE EXTENSION SERVICE

U.S. Department of Agriculture
New Mexico State University
Las Cruces, NM 88003