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The LIBRARY of Tucson Cactus and Botanical Society is located at 2754 N. Campbell Ave., Nancy Clarke Insurance Agency. Use your library. Learn what it is offering you. The following books have been added to the Library lately: "Cacti and Succulents", Haage; "Succulents for the Amateur"; "Cacti for the Amateur"; "Aloes of Tropical Africa and Madagascar", Reynolds; "The Genus Monadenium", Bally.

IN MEMORIAM: Mr. L. S. Fosdick, a member of Tucson Cactus & Botanical Society, passed away on January 31st. He was a retired professor of chemistry from Northwestern University. Mr. Fosdick was an enthusiastic member of our club and attended meetings as regularly as his chronic illness would allow. We extend our sincere sympathy to his family.

FRIENDSHIP

The greatest business in the world is that of making friends;
And no investment on the street pays larger dividends.
Life is a great investment, and no one lives in vain
Who guards a hundred friendships as a miser guards his gains.
.....contributed by Lura Fuller.

Dr. W. G. McGinnies, professor and director of the U. A. Office of Arid Lands Studies is one of the authors of a recent publication by the University of Arizona. "Deserts of the World" is a 788-page book which appraises research into their physical and biological environments. Dr. McGinnies is the founding president of our Cactus Society and is a member of our Board of Directors for 1969.

REVIEW OF EDWIN WAY TEALE'S FOUR CHOICE NATURE-TRAVEL BOOKS

One of our members who has recently enjoyed Edwin Way Teale's four books about the wonders and mysteries of Nature in our vast country has suggested that they might be brought to our attention. One of our great naturalists, he and his wife had for a decade dreamed and planned to leave New York City behind, some February, head for Florida, and drift NORTH WITH THE SPRING, following its flow as it advances on the average of about 15 miles a day, climbing mountains at perhaps 100 feet a day, racing down the long valleys. Their diaries resulted in their first book, and sparked their urge to follow each of the other three seasons, visiting every corner of the United States.

They planned to begin where spring first begins to stir its forces, down in the Everglades, and keep its pace, zigzagging by car behind its advancing front--17,000 miles, through 23 states they logged, for 130 days. They explored rivers, swamps and scrub, beaches and woods, plant life, diamond-back rattlers, birds and butterflies, turtles and alligators, animals, big and little, along the Gulf into the Louisiana marshes, back to the Okefenokee and up into the Great Smokies. There, an April Friday amazed them with a hundred miles of many species of warblers traveling with mockingbirds and cardinals and other birds on their way north. Anyone who has driven that magic Blue Ridge Parkway reads with a nostalgic twinge. They crossed the Piedmont Plateau for May in Virginia--- the dogwood and apple blossoms--then the lush vegetable farms in New Jersey and into the Jersey pine barrens, a last stronghold of the wildest wastelands and ingrown primitive people yet, in a long-settled region which is within a stone's throw of both Philadelphia and New York City. They explored Roger Tory Peterson's and John Kiernan's unspoiled wild Van Cortlandt Park in the Bronx; then went on up to the dunes and moors and bogs of Cape Cod and into Thoreau's woods and the New England mountain ranges, with their farthest northern point the top of Mt. Washington, on the 21st of June---the end of Spring--more than ever aware that the end is really just a gradual change, one season into another.

AUTUMN ACROSS AMERICA, the second book in the series, takes the two explorers 20,000 miles, several years later, from New England across 26 states into Michigan and Wisconsin and Minnesota, the great flyway of the Mississippi at harvest time in Iowa, on to Wyoming and Montana and the Northwest, and down the Pacific coast as far as Monterey and Yosemite. Always leisurely, they poked into out-of-the-way places in plains and mountains, deserts and the rainforests. The tumbleweeds attracted them to the extent of almost a dozen fascinating pages, intriguing to any victim of their overabundance. Their intermingling of nature and pioneer history and folklore and scientific facts can quickly sharpen the reader's awareness in his own immediate world.

Starting from the same spot in New Hampshire where they had ended their first adventure 10 years before, they began their winding wayfarer's JOURNEY INTO SUMMER. Again it was the 21st of June, the same birdsongs, the same daybreak. They covered over half the states in

the Union, from the backbone of New England, the White Mountains, to the backbone of the continent, the Rockies, all around the Great Lakes, from the northernmost boundaries down to Kansas, the center of the nation, exploring it from one end to the other; then all of Colorado. Middle Westerners will recognize their familiar haunts.

in 1965 WANDERING THROUGH WINTER was published, completing this tour of the natural history of this wide country. These are travel books as well, written with such love and appreciation and depth of experience that they well deserve Roger Peterson's comment that Edwin Teale's skill makes even the most blasé reader almost as interested in the least bug as in the most spectacular wild life. A local reader may feel temporarily miffed that their only attraction in Tucson seems to be their reunion with Mr. and Mrs. Joseph Wood Krutch for a few days. However, Teale has already talked at length about our cactus and succulents and birds and animals in accounts of other parts of the deserts, and his remarks about naturalists we know well, like Dr. Edmund Jaeger and William Gamble, show new sidelights on their work.

Any ruffled feelings on my part were effectively soothed by their adventure as they left Tucson for home. Ten miles east on U. S. 80 they pulled to the shoulder to enjoy the sweep of cholla and the jagged mountain horizon while traffic zipped by. In three minutes, a trailer truck stopped to see what was wrong and they realized that everyone who passed assumed they must be in trouble --the only comprehensible reason to halt. "All at once we were overwhelmed by a distate for super-highways, miracle miles, the thunder of traffic"--though they well knew they couldn't have gone so far so easily without their existence. They sat there praising back roads and remembering the appeal of the ones they'd had to pass up--so they decided to turn down the first good side road they came to, no matter where it led--which turned out to be to Patagonia.

We will all recognize ourselves in every response they make to the ocotillo and the beargrass, the phainopeplas and curve-billed thrashers and the cardinals, and the friendly people they encountered. They spent the night in Nogales, returned for an even more enchanting visit, and found themselves in a hurry to resume their way East.

This winter trip begins on December 21 in the far southwestern corner where California joins Mexico on the Pacific Ocean--the Silver Strand. Here they joined the watchers of the gray whale migration: then, through cities and rangelands and the ponderosas of the high country, down into the deserts, which at first seemed too harsh and forbidding. But they found that a desert is not to be known in a day or a night; one approaches it on its own terms, and then comes the discovery that one wants to know it intimately.

Reading about unfamiliar territory on your own favorite experiences, seeing it through the trained and loving eyes of this naturalist, brings a new sense of appreciation of this wonderful world around us.

.....Reviewed by Evangeline Scott .

 TUCSON KAKTOPHILES EXPLORE HAWAII

Mother and I visited Hawaii the last two weeks of October. Our tour included six islands, and it was surprising to see how dry much of the area is. Although some places in the Islands receive 300-500 inches of rain a year, many parts get only 20 inches. Mesquite trees lined the roads in these drier sections. On the island of Hawaii, we saw numerous prickly pear (*Op. megacantha*) growing in the cattle ranch country. Our bus driver said several types of parasites have been introduced to destroy the cactus, as it is harmful to the cattle. He pointed out clumps of cactus that were blackened from the parasites. Of course, he said, if the parasites are successful in killing all the cactus, then something else will have to be brought in to get rid of the parasites..and so on ad infinitum! Night-blooming cereus (*Hylocereus undatus* & *Selenicereus grandiflorus*) were frequently seen cascading over walls. It must be a glorious sight when in bloom. We visited Moir's Botanical Garden on the Island of Kauai. Some of you may have met the Moirs at the 1965 C & S Convention here, but I wasn't that lucky, nor did we meet them now, for they have retired and turned the Garden over to someone else. It is across the road from the ocean and ablaze with colorful succulents, plumeria trees, and water lilies. The succulents are mainly euphorbias, aloes, echeverias, and stapelias, with one shady spot for bromeliads. While the succulents seem to revel in that climate, there were not many cactus in the Garden..a few large clumps of cereus, one fat melocactus, some astrophytums, and rather unhappy echinopsis and mammillarias. The scant rainfall shouldn't bother the latter, so it may be the lack of winter rest and cold. One of my memories of that lovely Garden is of two toads half hidden under a stapelia flower, waiting expectantly for their dinner of pollinating flies.

.....Nancy Clarke

TWENTY-SECOND ANNUAL CACTUS SHOW

This show was held February 23 through March 2, 1969, in Webster Auditorium at Desert Botanical Garden in Papago Park, Phoenix. 13,000 visitors saw and learned about and enjoyed 732 exhibits presented by 104 exhibitors interested in Succulent Plants, Desert Trees and Shrubs, Arrangements, Photography, Paintings (desert subjects), Desert Woods.

Exhibitors from Tucson Cactus & Botanical Society won numerous awards in the many sections in which they entered plants. They are Rosa Christensen, John Robbins, Nancy Clarke, James Robbins.

Tucson Kaktophiles will be greatly pleased with LIBRARY NEWS from Desert Botanical Garden where a wing has been built on Webster Auditorium to house the generous gift of a fine and most valuable botanical library. This gift comes from Mr. M. C. Richter of Santa Barbara, California who is a book dealer and a collector of rare publications on cacti and the other succulents. Included in his gift collection is the Scott Haselton Library which Mr. Richter

added to his own library. Also, there is the Library Collection of the Editor of the French Cactus Journal. This Library at Desert Botanical Garden will be dedicated in ceremonies at a date during the summer which will be announced later.

Desert Botanical Garden receives some fine notices in journalistic publications. The Arizonian, Scottsdale, Arizona, Feb. 20, 1969, carried a spread of several pages with color photographs about the Garden. On March 9, 1969, the Chicago Tribune will run a full one page story on the garden, including a picture of it.

SEEN at the Cactus Show, March 2nd, from Tucson were: Lena Marvin, Roger and Goldie Dean, Alan and Betty Blackburn, Lois and Nancy Clarke, Rosa and Anne Christensen, Chatter-Box Shelby. The J. F. Bricks reported their visit here on Feb. 27th.

WHY did YOU not attend the fine CACTUS SHOW? WHY did you not EXHIBIT your fine plants?

13TH BIENNIAL CONVENTION OF CACTUS & SUCCULENT SOCIETY OF AMERICA, INC.
PASADENA, CALIFORNIA MAY 5th THRU MAY 9th 1969

Activity Schedule offers sessions on such subjects as: collecting cacti by air; the ocotillo family; the Mammillaria Picta Complex; dehydrated flowers; plant clinic; lithops; cacti of Peru; cactus collecting in Western Mexico; aloes; panel on grafting; peyote; cacti and photography; echeverias; Dudleyas.

Post Convention Tours through the Land of Cacti are possible into: Idria country, Baja California; the high country of northern Baja near the California border; backwoods country of central Sonora, Mexico; a 7 day trip to Guaymas and Alamos, Sonora, Mexico; the Clark Mountain area of California on the Nevada border; Palm Springs and Joshua Tree National Monument.

Reservations are required for convention attendance. Write Cactus & Succulent Society of America, c/o Mrs. Joyce Tate, Box 564, Sunnymead, California, 92388. Locally...phone Rosa Christensen---327-4601---for specific information like reservation forms, hotels, side trips, etc.

NOTES FROM OUR EXCHANGE PUBLICATIONS
"CRADLE OF CACTUS KNOWLEDGE AND CULTURE IN THE U. S. "

The Missouri Botanical (Shaw's) Garden has an outstanding horticulturist. He is Ladislaus Cutak whose work in the field of cacti culture and succulent and tropical plants has won international attention for the Garden. He is the author of several books, including "Cactus Guide" and "Cactus Personified". This Garden's collection was begun more than 100 years ago. As early as 1890 its unusual cactus collection was well known. Under Ladislaus Cutak's leadership, Shaw's Garden has become known as the cradle of cactus knowledge and culture in the U.S. He is recognized as a foremost authority on cactus. He has traveled more than 50,000 miles in southwestern United States and in Mexico searching for new species.

HOW PLANTS ARE NAMED

Part II

by

Harrison G. Yocum

This part of How Plants are Named will deal with the actual meanings of the names which, it is hoped, will give an understanding and appreciation of this interesting subject. It will be seen that the names are not restricted to cacti and succulents, but are applicable to all plant groups. This is quite appropriate since we are a Botanical as well as a Cactus Society.

To recapitulate, since Linnaeus, plants are named according to a system of binomial nomenclature, i.e. they have two names. For example, John Brown is a name which tells that Brown is the family to which John belongs, and John designates which one of the family is considered. In the plant name, the order is reversed. The name which tells the family or genus comes first, and the given name of the species comes last.

In examining the names and their significance, we find many varied origins, which may be divided accordingly:-

1. Names after persons: - notably physicians, naturalists, botanists and other men of science. Such names are readily apparent and will not be considered here.
2. Geographical or Place names: - designate the country or area to which the plant is native. Space does not permit their treatment here. Such names are very easy to understand as seen by such examples as -
 - indica - India
 - arizonica- Arizona
 - brasiliensis-Brazil
 - canariensis-Canary Islands
 - missouriensis-Missouri
3. Prefixes and Suffixes - added to a name to alter its meaning.
4. Descriptive names: - This and the previous group constitute the most important in our consideration. These names are derived on basis of color, shape, habit of growth, type of habitat, luster, size, plant parts, etc.
5. Anagrams: - names made by rearranging the letters of a name.
6. Native names: - adaptations from vernacular common names. An example would be one of the species names of *Lemaireocereus*, - chichipe.

No attempt is made to include all names: rather those most frequently encountered are presented. It will be recalled from Part I that the endings will agree in number and gender with the entire name, the vowel endings - a, i, o, us - being most frequently substituted. This list is arranged alphabetically for ease of finding the meaning of a particular name. This way, it will serve as a ready reference and at the same time is an excellent way to extend one's vocabulary.

A-

- | | | | |
|-----------|----------------------------|------------|--|
| a- | not, without | acuminata- | tapering to a slender point |
| ab- | from, away | acuta | - sharp |
| acantha | - spine, thorn | ad | - to, towards |
| acro- | tip, end | ae- | from |
| actis | - ray | aequalis | - equal |
| aculeata- | prickly, with small spines | affinis- | related to (another species), bordering on |

A - cont'd

agave - noble, illustrious
 agglomeratus - clustered, heaped up
 aggregata - " "
 alata - winged
 alba - white
 alcis - elk
 alpestris) - alpine
 alpinus)
 alternatus - placed singly, first 1 then
 another, alternate
 alta - tall, high
 alveolata - pitted like a honey-comb
 amabilis - lovely
 amara - bitter
 ambly - blunt
 amethystina - violet or amethyst-colored
 ammophila - sand-loving
 amoenus - pleasing
 amphi - half
 amplexi - clasping
 an - not, without
 ana - implies motion or growth upwards; as
 a Suffix used in forming specific
 names from person or place names
 anceps - 2-edged, 2-headed
 ancistro - thorny
 angularis - angled
 angusti - narrow
 anomala - unlike others, different
 anthus - flower
 anti - against
 antiquorum - of the ancients

bella - beautiful
 bi - 2, twice
 brachiata - with widely spreading
 branches
 brachy - short
 bractata - with bracts

cactus - prickly plant
 caerulescens) - sky-blue
 caeruleus)
 caesius - bluish-gray
 caespitosa - growing in tufts
 calama - reed
 cali)
 calli) - beautiful
 calo)
 calycos - calyx, sepals
 calyptro)
 calypta) - hidden, covered

apici - at the summit or top
 apo - from, away
 applanata - flattened
 apricus - basking in the sun, liking
 sunshine
 arborescens) - tree-like
 arboreus)
 archon - majestic, a ruler
 arenaria - of sand (grows in sand)
 argentata) - silvery
 argentea)
 argo - shining
 aridus - arid, parched
 aristata - awned, with a bristle-
 like appendage
 armata - armed
 aromatica - fragrant
 arthro - jointed
 articulata - jointed
 asterias - star-like
 astro - star
 atro - dark
 augusta - majestic
 aurantiaca - orange color
 aurea - golden
 auriculata - auricled, with ear-
 like appendages
 australis) - southern
 austro)
 azureus - sky blue

B-

brevi - short
 brunneus - brown
 bu - monstrous, huge
 bubalina - of the gazelles or
 antelope

C-

campestris - of the fields
 campto - bent, curved
 candelabra - like a candle-stick
 with many branches
 candescens)
 candicans) - whitish
 candida - white
 canescens) - gray or hoary
 canus)
 calcareo - chalky white
 capitata - with heads, head-shaped
 capri - goat

C- continued

- caput - head
 cardio - heart
 carpus - fruit
 caryo - nut
 cata - down, downward
 caudata - tailed
 caules } - stem
 caulis }
- centi-hundred
 centri-center, in the middle
 cephalus } - head
 ceps }
- cerato - horn
 ceratus - covered with wax
 cereus - wax candle
 ceri - wax
 cervi - related to deer
 chamae - low, dwarf, on the ground
 chilio - thousand
 chino }
 chiono } snowy
 chloro (us) - pale green, greenish-yellow
- chroma - color
 chrysa - golden
 ciliaris - with hair-like eyelashes, fringed
 ciliata - fringed with hairs
 cineria - ashy-gray
 cinque (i) - five
 circum - around, about
 cirri - tendrils
 clada - branch, stem
 clandestina - hidden, concealed
 clava - club
 clavata - club-shaped
 clavo - bright
 clino - slant, lean or incline
 cleisto - closed
 coccinea - scarlet
 coerulescens - sky-blue
 cocco - seed
 columnaris - tall and cylindrical
 coma } - hair
 comosa }
- con- with, together
 concinnus - neat, elegant
 concolor - of the same color
 contortus - twisted, intricate
 cor- with, together
 cordata - heart-shaped
 coriacea - leathery
 cornus - horn
- coronaria - crowned, like a wreath
 corrugata - wrinkled
 coryne - club
 coryphe - top, crown, summit
 costata - ribbed
 cotini - a shrub furnishing a purple color
 crassa - thick, dense
 cruci - cross
 crinita - hairy
 crispa - curly
 cristata - crested
 croceus - saffron colored, yellow
 cryo - cold, frost
 cten - comb
 cucullatus - hooded
 cucumis - cucumber
 cuneata - wedge-shaped, with narrow end at point of attachment.
- cupreata - coppery
 curvata - curved
 cuspidata - tipped with a sharp rigid point
 cyclo - circle
 cylindracea } - cylindrical in form
 cylindrica }
- cymbi - boat, hollow as a boat, vessel, bowl, etc.
 cypho - hump
 cyrto - curved

