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DEPARTMENT OF PARKS AND WILDLIFE



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Next deadline Wed, 20 Dec 95

EDITORIAL

After six issues and 12 months, this will be the last edition of SID News produced by Patrick and I, and we are pleased that it's a bumper christmas issue.

We would as always invite people to offer constructive criticism for improving SID News, which we will happily pass on to the new editor(s). Which brings us to the next point - any volunteers? Anyone who would like to hone their editorial and desk-top publishing skills on a simple newsletter, we're waiting to hear from you!

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DIVISIONAL NOTES

Group notes

BIOCONSERVATION GROUP

Head of Group

Welcome to Neil Burrows who commenced as new HOG on September 11. Neil has been very busy this week visting scientific, technical and administration staff in the the group for an informal chat about their work.

And of course thanks to Tony Start for his work as Acting HOG, a position he has held since mid-1992.

eds

The Fire Ecology Roadshow

Following a request from CALMfire, Gordon Friend, Dave Ward and I spent a week in August travelling the south-west telling people about the latest forest fire ecology research and findings. Lachie McCaw joined us for the southern forests leg of the tour. We visited all 12 districts/work centres in the three forest regions and made night presentations to community groups at Bunbury, Balingup, Margaret River and Manjimup. It was a hectic but very satisfying excercise. In all, we made about 17 presentations and I'm sure by the end of the tour, we all became very bored listening to each others presentations. To maintain our enthusiasm, we discussed the possibility of swapping talks; I would present Gordon's, he would present Dave's etc.!

Dave talked about the research he is doing on the potential of grass trees as a means of reconstructing the history and pre-history of fire. Dave's audiences were spellbound as he talked about Aboriginal burning, measels epidemics in the Collie region and the history of logging and burning, all from black bands hidden beneath the charcoal exterior of grass tree stems.

Gordon captured the attention of information hungry forest managers with data on the effects of fire on animals in the wheatbelt and forest areas. All agreed that to be reincarnated as a phascogale would be a fate worse than death itself (males die after breeding!).

Lachie discussed the research he is doing in young evenaged karri regrowth stands and provided information about prescriptions for fuel reduction burns and the impacts of these fires on trees. Based on the life history attributes of selected fauna and flora, we were able to introduce our audiences to a fire regime which we believe (in the absence of long term data) could meet protection and conservation objectives.

I presented some findings on the regeneration response and flowering phenology (post-fire) of about 300 jarrah forest understorey species under study in my long term fire ecology plots.

The elements of this regime include variation in the season of burning (spring and occassional autumn burns), variation in the time between burns, including a fire free period of 12-16 years, aiming for patchy burns and generally reducing the size of prescribed burns to less than about 1,000 ha. By and large, this was well received.

Since our "road show" we have received some very positive feed back about our presentations. The interest shown by our audiences and the desire for information, especially delivered "in the flesh" was strong indeed, confirming to me that the best way to interact with people and to get our messages across is verbally and in person.

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Bridal Creeper Symposium

Bridal creeper is regarded as the most serious environmental weed in the southwest of Western Australia. Since the mid 1980's it has spread rapidly through much of the southern wheatbelt, coastal environments and parts of the southwest forest. The burgeoning presence of this horticultural 'escapee' now poses a major threat to land managers and community groups.

In an attempt to address this problem a Bridal Creeper Symposium was organised by Patrick Pigott and David

Lamont (WA Roadside Conservation Committee). About 65 people from a diverse array of community groups, local government, academic institutions and government departments attended the symposium.

Topics discussed included the history, distribution, ecology, biological control, prediction of spread, management planning and chemical and physical control of bridal creeper using case studies from Western Australia, South Australia and Victoria.

Although no formal discussions took place after talks were finished, a motion proposed by Mrs Joanna Seabrook (WA Roadside Conservation Committee) bridal creeper to be declared by Agriculture Western Australia was easily carried by the meeting. The Roadside Conservation Committee were requested will preparing a letter to the Minister for Agriculture.

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BIORESOURCES GROUP

Seance At Dryandra!

As one of the people who came through the crystal ball process of the Bioresources seance, I think I can speak for us all in saying that it was a most worthwhile group meeting. Using a crystal ball as a method to foretell the eventual budget figure might be as accurate as any other, but nevertheless, several interesting action items arose during the seance and a follow up meeting will be held at 1:00 p.m. on December 1st at Woodvale to be followed by a BBQ sundowner (see below - eds).

The two day event held at the Dryandra Forest Village on October 12 and 13 went smoothly and was mostly tape recorded. Yours truly is struggling through the transcription at this moment and a report is forthcoming. Thankfully the evening session where Alex demonstrated the CALM Web to us was not tape recorded as there was some rowdy behaviour from an audience member (who shall remain nameless) when an article of underclothing was discarded and the resulting furor would have shortcircuited the tape recorder! As it is, I have had to make some editorial decisions while listening to the playback such as whether I should include the magpie warbling sounds contributed by Angus, the very loud squirming noises contributed by Bruce, frustration sounds coming from Neville when he kept losing his pencil lead and Judy's sea-lion impersonations. Eventually everyone will get a report complete with the action items and ideas that were generated.

We'd like to apologize about the fact that due to financial constraints we were unable to invite more people (in particular, our hard working contractors) to the seance, but a committment has been made to include everyone who is interested in attending to our follow up meeting. By the way, the prize for loudest snorer was impossible to award, as it was a toss up between Ray Wills (my view of all of this is well described in the following cartoon - ed. [RW]) and Angas Hopkins, and so far no decision has been made. Anyone caring to cast a vote can let us know at the next meeting. We have, however, all gained new insight into Carolyn Wills' level of tolerance! The prize for Champion Food Consumer is

still with Brendan Lepschi, in spite Allan Clarke's valiant efforts in that department.

I'd like to especially thank Allan Burbidge for his intrepid bus driving role and all of us can take a bow for the hard work we put in to cover as many issues as we could in the time frame allowed. It was enlightening for us to hear each other's gripes and worries during these difficult times, and to actually (in some instances) be able to address them. I think I can speak for us all in saying that it was a successful and informative meeting and to thank Neville for giving us the opportunity.

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Mark Lynch, The West Australian newspaper, 21 Oct 95

BBQ sundowner

As mentioned above, there will be a BBQ Sundower after the BRG meeting on 1 Dec 95 at Woodvale. Please bring your own meat; there is a charge of \$2.00 to cover drinks, bread rolls and salad.

Will all people wishing to stay for the BBQ Sundowner please RSVP to Di Johns (334 0500) by COB Wed 29 Nov 95.

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Centre notes

Сомо

Welcome to Jon Brand who has joined the Sustainable Resources Group as a Research Scientist to work on Australian Sandalwood (Santalum spicatum). Jon was previously with the Agriculture Department.

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HERBARIUM

New moss record for WA

Brian Best has identified a new moss record for WA - Pottia truncata collected from the Kennedy Range National Park.

Relocation of Cryptogam

The entire cryptogam collection has now been relocated from the Undercroft Wing to the old Reference Herbarium. Families 216 to 220 formerly located in the

South Wing has been shifted to the Undercroft Wing to temporary create more space for the very packed Eucalypt shelves. So we continue to play musical shelves. For your information the location of the various plant families are:

Undercroft Wing: Families 1 to 89, 175 to 220

North Wing: Families 163; 90 to 173

South Wing: Families 221 to 345

Specimen Storage

Specimen storage space at the herbarium in the last few years is at a premium. Even the space above the compactus is literally covered with boxes of specimens. At the last audit there were 992 boxes (c.50000 specimens) sitting on top of the compactus representing a hazard and worst, information which is kept unavailable because of the need of final processing.

Help us help you. If you have data locked away in boxes we desperately need your labels - then we can do the rest. The Herbarium has an excellent team of technicians working in tandem with a top team of volunteers that would just love to clear this backlog.

New Volunteers

We are privileged to have 9 new volunteers join the Herbarium. We welcome:

- Mounting team: Joy Morgan and Rae Papenfus
- Backlog Collections: Gilbert Marsh
- Geocoding: Margaret Papst
- · Micro fungi Curation: Dr Amy Tan
- Identification: Thelma Palmer & Patricia Wenham
- Descriptive Catalogue of WA project: Leah Segal & Barbara Randall

Our volunteers continue to do fantastic work for us.

Volunteers Function/Talkfest

At the last volunteer function, the volunteers were treated to a sneak preview of the latest innovations in the identification of Acacias by Bruce Maslin. The talk, "What wattle where" went across well and the intkey programme impressed everyone as it was put through its paces to key out acacia specimens in a matter of minutes.

The talk was followed by the annual volunteer talkfest chaired by Judy Wheeler Acting HOG Bio-resources. This annual event now in its second year was organised to give our dedicated team of volunteers an opportunity to provide input into the work carried out at the Herbarium. From some of the issues action plans were formulated. The meeting was followed by a staff/volunteer BBQ which was most enjoyable.

Visitors

The Herbarium had more than the usual number of overseas and interstate visitors in the last month.

- Andrea Case from University of Toronto
- Linda Kervin and Jim Cane from Auburn University, USA
- Dr Barbara Briggs from NSW working on Restionaceae
- Dr Ken Hill from NSW
- Lindy Cayser from CANB working on Billardiera
- Phil Davidson from University of Queensland

 Karyn Malling, Jenny Hart and Song Wong from Sydney University

Services of John Eygenraam

John Eygenraam is the quiet achiever of the Herbarium staff. John works from the Shenton Park Rehabilitation Center. If you require quality word processing work that is not required yesterday, please contact Chang Sha (334 0504 or changf@herb.sid). For your information John typed Beard's book on South African Proteas.

changf@herb.sid

Unpublished Taxonomic Works

A number of unpublished taxonomic reviews have been produced to facilitate identification of Western Australian plants belonging to poorly known groups. The information provided includes keys and a complete list of taxa with habitats, distributions, flowering times, synonyms and notes. A review of the Tiliaceae entitled "A Conservation Priority List for the Tiliaceae of Western Australia and a Taxonomic Review of the Species occurring in the Eremaean Botanical Province" is lodged in the Woodvale and Herbarium libraries. Other taxonomic reviews (in less advanced stages of completion) dealing with the Apiaceae, Chloanthaceae, Cyperaceae, *Gonocarpus* (Haloragaceae), *Hemigenia* (Lamiaceae) and Rhamnaceae can be obtained from Barbara Rye at the W.A. Herbarium.

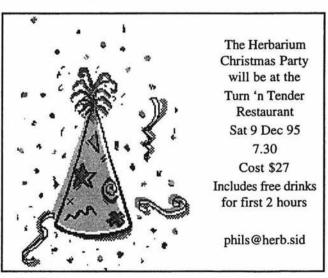
barabarar@herb.sid

Specimen Collecting Books

For a specimen to be of any use detailed information is a must. To ensure that all the relevant information is recorded the Herbarium has designed a new collecting book accompanied by a collecting guide to assist collectors. This book is avaliable free of charge to all SID staff. The cost to all other CALM staff is small fee of \$5. Ring Di (3340500) if you want a copy.

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Christmas Party



KARRATHA

Pilbara Progress

In early September, Stephen van Leeuwen, Bob Bromilow, Phil Fuller and CALM volunteer Colin Davis

headed off to the Barlee Range Nature Reserve. This trip was the last planned for the biological survey of the reserve which has been funded by the Heritage Council of Western Australia. The trip resulted in the collection of 264 plant specimens and the identification of 92 birds. Most of the plants collected represent new records for the reserve while others represent the first examples of flowering/fruiting material. Many of the plants collected were annuals or ephemerals which had not been collected on previous trips because of the drought-like conditions in the area over the past three years. The passage of Cyclone Bobby through the Ashburton in February ensured that such plants were abundant during the trip. Evidence of the high rainfall received from Cyclone Bobby was everywhere, with the reserve's claypan full, pools in the main gorge overflowing, debris and bruising on river gum to about 6m above the stream bed, tracks washed out end boundary fences down. While working In the reserve, a CALM crew from Exmouth, led by Senior Ranger Neil Scott, joined us for a few days. Durng their time in the reserve they fixed the clay pan boundary fence and had a look around. Biological highlights from the trip were:

- the collection of flowering/fruiting material for several plant taxa which have remained unidentified because of the presence of sterile material only;
- the recording of 92 bird species which included a Dollar Bird, Great Egret, Great Egret, Black-shouldered Kite and large flocks of Western Gerygone (!!);
- the recording on 54 bird species at some stage of breeding; and
- · the donkey roast.

Once back from Barlee Range work continued on preparing the botanical survey report for the Marandoo to Great Northern Highway Road through Karijini National Park for Main Roads Western Australia. BB mastered MapInfo with some much-appreciated assistance from the cartographers at Hamersley Iron's Future Mine Resource Exploration Group. Copies of the draft botanical survey report have now been forwarded to colleagues for comment. Also during this time, reviews of several development projects were undertaken including Ausi Steel's Direct Reduced-Hot Briquetted Iron plant proposal for Cape Lambert. SB also continued to prepare equipment and machinery for the Little Sandy Desert biological survey installation trip.

Several visitors were also welcomed to the Pilbara during this time. They included Robyn and Bill Barker (SA Herbarium) who were in search of Sida, Abutilon, Hakea, Tribulis and a varied array of other taxa, and Phil Short (Vic Herbarium) who was in search of Asteraceae. Bill was very excited on arrival at the Karratha CALM office thinking he had just found a new species of Oxalis. However, after inspection and a gentle let down he was informed that his specimen was in fact Cleome oxalidea. Also to visit were Norbert Kilian and Susanne Hanjir from Berlin who were also in search of Asteraceae. Unfamiliar with the Pilbara, it took quite a few CALM staff to convince our German botanists that they should carry additional water and fuel with them and obtain

another spare tyre for their hire car before venturing off into the central Pilbara. Everyone in the Karratha Office was pleased when they returned safely after three weeks. Numerous visits were also received from seed merchants and their collectors trying to glean information on the best areas to collect seed and obtain identification for the seeds that they had already collected.

In October, SVL, BIB, PJF, John Angus (CALM contractor) and five volunteers supplied by the Australian Trust for Conservation Volunteers (ATCV) ventured out into the Little Sandy Desert to install trapping grids and establish flora sampling quadrats in anticipation of the forthcoming biological survey of the region. The trip was very successful with all sites and pits being installed ahead of schedule. The weather was quite pleasant for most of the trip and the camel roast made an agreeable dietary change. A total of 15 sites (30 holes) were established through the study area representing the array of communities typical of the region. These sites varied in geological setting, land system and vegetation association.

If you have a job which requires volunteers, I unreservedly recommend the crew from ATCV. They are very professional in their management and organisation, and the personnel they supply are as keen as mustard. I would also like to thank BB and PJF for their efforts during this trip (blasting made the job considerably easier) and my rock drill comrade, John Angus, for his untiring efforts.

Now the holidays begin. All the best to one and all in the Division for the festive season and we'll catch you in the New Year.

Steve van Leeuwen, Karratha

MANJIMUP

Staff

Tanya English has joined the staff at Manjimup SID for twelve months to replace Joanne who is on maternity leave. Tanya has worked for a number of years in local government, most recently with the Manjimup Shire. Please introduce yourself and welcome her to CALM.

Mike Mason has moved into an office at the Manjimup centre, vacating his previous abode at the West Manjimup Plant Propagation centre. Mike Cully continues to operate from West Manjimup.

Safety

With the onset of summer and the fire season, staff at Manjimup were reminded at a recent staff meeting of the need to keep vehicle first aid kits up to standard, and to carry ample supplies of clean, fresh water in vehicles.

Morning and afternoon tea at Manjimup has become somewhat more adventurous recently with the sighting of a large Tiger Snake in the garden near the outdoor tables. Caution is recommended. Corporate Relations have expressed interest in marketing an ecotourism program at the Centre centred on billy tea and first aid.

Deferred Forest Assessment

A number of SID staff were involved in a survey of forests contained within stream and road reserves in the Southern Forest Region. Regional and District staff were also involved in the week-long exercise, which aimed to document details of forest structure, old-growth values, and plant community type. Information from the survey is being used in CALM's negotiations with the Commonwealth Government over Deferred Forests.

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WOODVALE

Weed control

Mike Churches and two DEET employees have been working methodically at control of the impressive invasion of weeds on the Woodvale Reserve post December 94 fire. The primary goal was to apply glyphosate with wick wipers to the *Homeria* (Cape Tulip) in the priority conservation areas. Staff from the job skills programs employed at Yanchep, volunteers from the Australian Trust for Conservation Volunteers and Woodvale staff also assisted. So far some good results appear to have been achieved.

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WATSCU

Felicity Bunny and Kim Kershaw had their first day at Woodvale on Wed 1 Nov. They are the two new members of WATSCU (WA Threatened Species and Communities Unit), working with critically threatened flora. Felicity will be implementing the 11 interim management guidelines which have been completed and the 21 that Kim and myself are currently working on. Good to see Kim's forgotten his tie today.

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THOUGHT FOR THE DAY

The sky has holes where the rain gets in, but the holes are small, that's why rain is thin.

Spike Milligan

RECENTLY APPROVED PUBLICATIONS

Wardell-Johnson G, Williams J E, Hill K, & Cummings R. Evolutionary biogeography and contemporary

distribution of Eucalyptus" for publication in Eucalypt ecology: Individuals to ecosystems. Cambridge University Press.

Lepschi B J "A taxonomic revision of *Macarthuria* in Western Australia" for publication in *Nuytsia*.

Brown A, Keighery G J, Thomson C. "Common wildflowers of the south west." for publication in Public Booklet

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FORTHCOMING SEMINARS

SID Seminars

Thu 23 Nov 95, 3:00 pm at Woodvale

 Tony Friend - The problems of being a small termiteeating marsupial.

(Or "a diminutive maruspialaceous isopterophage"? - eds)

Thu 30 Nov 95, 3:00 pm at Woodvale

· Jim Lane - Banded Stilt breeding in the Goldfields.

Thu 14 Dec 95, 3:00 pm at Woodvale

· Grant Wardell-Johnson - Tingle Forests.

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Royal Society of Western Australia

Medal Lecture

Mon 20 Nov 95, 8.00 pm at Old Zoology Building, UWA

• Prof A R Main - The study of nature: a seamless tapestry.

Conservation Biology Discussion Group Tues 12 Dec 95, 5.30 pm at University House, UWA.

 Note: There will be a (cheap) meal after the December meeting (Dec 12th) - please RSVP.

Contact Kristina Lemson, Botany, UWA, 380 2203

SOCIAL

Wine Club

SID Wine Club will be held on:

· Fri 24 Nov 95 at the Herbarium

Non-members welcome (\$5 per head); please notify me no later than the Thursday before.

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SOME OTHER THOUGHTS FROM PEOPLE WHO SHOULD HAVE KNOWN BETTER!

"Computers in the future may weigh no more than 1.5 tons"

--Popular Mechanics, forecasting the relentless march of science, 1949

"We don't like their sound, and guitar music is on the way out."

-Decca Recording Co. rejecting the Beatles, 1962. "There is no reason anyone would want a computer in their home."

--Ken Olson, president, chairman and founder of Digital Equipment Corp., 1977

"I think there is a world market for maybe five computers."

-- Thomas Watson, chairman of IBM, 1943

"I have traveled the length and breadth of this country and talked with the best people, and I can assure you that data processing is a fad that won't last out the year."

-The editor of business books for Prentice Hall, 1957
"But what ... is it good for?"

--Engineer at the Advanced Computing Systems Division of IBM, 1968, commenting on the microchip. "This 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us."

--Western Union internal memo, 1876.

"The wireless music box has no imaginable commercial value. Who would pay for a message sent to nobody in particular?"

--David Sarnoff's associates in response to his urgings for investment in the radio in the 1920s. "I'm just glad it'll be Clark Gable who's falling on his face and not Gary Cooper."

--Gary Cooper on his decision not to take the leading role in "Gone With The Wind."

"Heavier-than-air flying machines are impossible."

--Lord Kelvin, president, Royal Society, 1895.

"Drill for oil? You mean drill into the ground to try and find oil? You're crazy."

--Drillers who Edwin L. Drake tried to enlist to his project to drill for oil in 1859.

"Airplanes are interesting toys but of no military value."

--Marechal Ferdinand Foch, Prof. of Strategy, Ecole
Superieure de Guerre.

"Who the hell wants to hear actors talk?"

-- H.M. Warner, Warner Brothers, 1927.

"Everything that can be invented has been invented."

--Charles H. Duell, Commissioner, U.S. Office of Patents, 1899.

"The abdomen, the chest, and the brain will forever be shut from the intrusion of the wise and humane surgeon".

--Sir John Eric Ericksen, British surgeon, appointed Surgeon- Extraordinary to Queen Victoria 1873. "So we went to Atari and said, 'Hey, we've got this amazing thing, even built with some of your parts, and what do you think about funding us? Or we'll give it to you. We just want to do it. Pay our salary, we'll come work for you.' And they said, 'No.' So then we went to Hewlett-Packard, and they said, 'Hey, we don't need you. You haven't got through college yet.'"

--Apple Computer Inc. founder Steve Jobs on attempts to get Atari and H-P interested in his and Steve Wozniak's personal computer.

"If I had thought about it, I wouldn't have done the experiment. The literature was full of examples that said you can't do this."

--Spencer Silver on the work that led to the unique adhesives for 3-M "Post-It" Notepads.

"Stocks have reached what looks like a permanently high plateau."

--Irving Fisher, Professor of Economics, Yale University, 1929.

"Louis Pasteur's theory of germs is ridiculous fiction".
--Pierre Pachet, Prof. of Physiology at Toulouse, 1872
"640K ought to be enough for anybody."

-- Bill Gates, 1981

FEATURE ARTICLE

The name of the Boab

As everyone knows, the scientific name of the Boab is Adansonia gregorii, right? Well, not necessarily. In a recent taxonomic revision of Adansonia (Baum 1995), the species received a name change to Adansonia gibbosa. The discoverer of the Boab, Allan Cunningham, saw only fruiting plants and thought the plant was a Capparis, which belongs in quite a different family to the Boab. For reason and also because Cunningham's posthumously published journal was not intended as a formal taxonomic work, plus the brevity of the descriptive observations on the species, resulted in the name being both overlooked and unrecognised as applying to the Boab. The connection was made a decade ago by Gordon Guymer of the Oueensland Herbarium, but he ultimately decided not to formally make the change. Unfortunately his findings came to the attention of another scientist, David Baum, who considered it necessary to change the name. In this article I want to inform CALM users of plant names that this re-naming is in dispute, and that the established name, A. gregorii, should continue to be used for the present.

Until recently it was a common enough practice to replace the name of a plant with another if an earlier published name was found. This was because the International Code of Botanical Nomenclature (ICBN), which governs the scientific naming of plants, emphasised priority of publication as a criterion by which to objectively decide among alternative names for a given species.

It has long been the fond hope of taxonomists that, over time, the correct name would be established for all species of plants, and that the discovery of earlier names would dwindle completely away. This should have led to a stable nomenclature, except for when research showed that a plant was classified incorrectly, and thus had to be placed in a different genus, or was recognised as being the same as another species. Such name changes are regarded as unavoidable, given our system of naming, because they are the result of a genuine increase in knowledge. Unfortunately people have continued to find earlier names at a high rate, leading to many name changes for no other reason than strict adherence to a set of rules. Consequently pressure grew to modify the rules.

In 1993 a change was made to the ICBN which permits the conserving of names against earlier, rarely used or long forgotten names, and a strong recommendation was made to taxonomists to use the provision to avoid disadvantageous name changes for purely nomenclatural reasons. The re-naming of the Boab was for purely nomenclatural reasons, and is disadvantageous, so an application is being prepared (Guymer & Wilson, in prep.) to overturn the change and re-instate the name A. gregorii. This will take some time, so until the matter is resolved, it is advisable to continue to use the familiar name.

Reference

Baum, D.A. (1995). A systematic revision of *Adansonia* (Bombacaceae). Annals of the Missouri Botanical Garden 82: 440-470.

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