

MONTHLY NEWSLETTER OF THE STANTHORPE FIELD  
NATURALIST CLUB.P.O. Box 154  
Stanthorpe,  
N.S.W. 4380.Officers and Committee 1975-1976.President  
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Mr. Frank Wilkinson  
Mr. Maurice Passmore  
Mrs. Joan Stevenson  
Mrs. Dot Archer  
Mrs. Dot Archer  
Mrs. Ailsa Wilkinson  
Mr. & Mrs. W. Cathcart  
Mrs. Z. Newman  
Mrs. W. McCosker  
Mr. B. McDonagh  
Mr. M. Passmore  
Mr. John Stevenson  
Mr. R. McCosker  
Mrs. Joan Harrolett  
Mr. Errol WalkerACTIVITIESMEETINGS - 4th Wednesday of each Month in C.W.A. Rooms at 8.00 p.m.OUTINGS - Each Sunday PRECEDING the 4th Wednesday.ANNUAL SUBSCRIPTIONS

Single - \$1.50

Family - \$2.00

PROGRAMMEFIELD OUTING S:"CHRISTMAS BREAKUP"Place - JUNCTION - Girrawoon National Park Date - Sunday, December 21/75.Leaders - Mr. & Mrs. W. McCosker. B.B.Q. Fire will be lit at 5 p.m. -  
come earlier if you want a swim etc.January Outing - Place - Jelly's Falls & Donnelly's Castle  
Leader - Tom ArcherDATE - Sunday, January 25th, 1976. Meet at Weeroona Park, 9.30 a.m.NEXT MEETING - January 28th, 1976 at C.W.A. Rooms at 8 p.m.  
Guest Speaker will be either Dr. Kirkpatrick or Mr. J. Passmore.



MINUTES OF THE GENERAL MEETING HELD NOVEMBER 26th, 1975.

Present - 40

Apologies - 8.

A welcome was extended to all present by our President, Mr. G.N. Butler, with special mention to members who had been away on holidays.

MINUTES - That the minutes of the October meeting be taken "as read" as per the Nats. Magazine was moved by W. Newmand and seconded by M. Passmore. CARRIED.  
BUSINESS FROM MINUTES - Nil.

Correspondence - Inward - received from the following -

Magazines - Darling Downs Nat s No. 267  
 Q.N.C. No. 80  
 Chinchilla Nats.

Letters from - Dr. Kirkpatrick - Warwick  
 Total Environment Centre, Sydney  
 National Library - Canberra  
 Nat. Parks & Wildlife, Brisbane  
 Aust. Entomology Press

Outward - forwarded to:-

Adult Education  
 2 letters to 4 Q.S.  
 Dr. Kirkpatrick

It was moved by F. Wilkinson and seconded by E. Jackson that the Inward be received and the outward adopted. Carried.

TREASURER'S REPORT - It was moved by D. Archer that credit balance of \$135.82 be received and accounts for payment of S. Lee & Co. \$25.75, Post age \$8.61 and J. Harslett \$4.00 be passed for payment. Seconded by M. Marsden. Carried.

Outing Reports - Special Outing - Mrs. McCosker reported 20 attended. Party was split up into 2 and different areas were seen. Wildflowers were very good.

Monthly Outing - About 35 attended Possum outing to Maryland with M. Passmore. Not a great number seen. Sightings were made of the Greater Glider. A very successful outing.

ARTS COUNCIL DISPLAY - Mrs. D. Archer & Mrs. J. Harslett reported on the success of this display, and interest shown by the public in our activities. Specimens and especially the bird calls were popular.

NEXT OUTING - This will be the Christmas Breakup to be held at the JUNCTION on Sunday, December 21st from 2 p.m. with B.B.Q. tea about 5 p.m. All members are invited. Proceed to Junction in your own time. Moved by M. Passmore and seconded by F. Wilkinson. Carried.

January Outing - The proposed January outing will be to Jolly's Falls and Donnelly's Castle under the leadership of T. Archer.

Guest Speaker - Depending on the availability of Dr. Kirkpatrick on January 28th, guest speaker will be either he or Mr. J. Passmore.

General Business - Follow up on letters in correspondence will be taken up by Mr. N. Butler who will look into the Rocky Creek - Dhu Vale Area and report back. Also re the Total Environment Centre - Sydney letter; Mr. M. Passmore will peruse letter as area details of parts in northern N.S.W. bordering Queensland need investigation.



There being no further business the meeting closed at 8.50 p.m. after which we were very capably entertained by Mrs. J. Hamslett who took us "Here & There" by slides and dialogue.

### Outing to Ruby Creek

On the last club outing to Ruby Creek our main objectives - the possums and gliders - may have been a little shy and elusive but the other arboreal specialists, the feathered ones, were both numerous and co-operative. One shady spot along the creek bank was obviously a favoured bathing area and numbers of honeyeaters were splashing and preening quite oblivious of our presence. We had particularly good views of several immature White-naped Honeyeaters and they looked much browner overall than the mature birds who have black heads and olivegreen backs with a white crescent dividing the colours. A vivid splash of colour was provided by a Scarlet Honeyeater and two young Little Lorikeets sat side by side just outside their nesting hollow peering down at us with an interest equalling ours. We also watched for some time a pair of black-shouldered Kites and were intrigued to see one bird doing quite a lot of bobbing and bowing on the topmost limb of a dead tree. The performance must have found favour with the mate as the pair eventually flew away together. The list of birds recorded follows:

Sparrow,	noisy minor,	restless flycatcher,	Rufus Whistler,	Maggie,
White Naped Honeyeater,		Noisy Friarbird	White throat ed Treecreeper	
Grey Thrush,	Red Browed Finch,	Crow	Yellow faced honeyeater	
Blackfaced Cuckoo Shrike		Scarlet Honeyeater	White-necked Heron	
Mistletoe bird		White throated Warbler	Little Cuckoo Shrike	
Little Lorikeet		White-eared Honeyeater,	Kookaburra	
Orangewinged Sitella		Spotted Pardalote,	Blackheaded Pardalote	
Sacred Kingfisher		Brown Songlark,	White winged Triller	
Eastern Rosella,		Blackshouldered Kite	Spurwing Plover,	
Jacky Winter, and Dollar Bird.				

Z. Newman.

### REPORT ON DISPLAY BY NATS CLUB AT ARTS COUNCIL "Lets make our own entertainment".

At the recent Arts Council "Lets make our own entertainment" held on Friday, November 21st in the Civic Centre, the Club can be very pleased with the display showing the interests and activities of our club.

The Central theme was depicted by a tree with our activities of flora, fauna, birds, geology, campouts and picnics represented by the branches and as a root system "our high ideals". These propagated a new species of tree the "Ecology Watchdogs".

A very suitable conservationists pledge was adopted and its message of "preserving" all forms of ecology was most appropriate.

Actual specimens were displayed. The fossils, copper samples, drill cores, moths and beetles, proved very popular, but greatest curiosity was aroused from our elusive birds. Their melodies penetrated peoples' awareness who voiced their delight at hearing such an unexpected pleasure.

Club thanks go to the members who gave their time to prepare, arrange and man the display and to Zidbe a special thanks for the bird call tapes.

J. Stevenson.



CONTINENTAL DRIFT

by Maurice Passmore.

Having considered the evidence for continental drift in the previous article we can now consider the detail of the hypothesis.

The theory proposes the existence of several large plates which contain the continental masses. These are slowly moving away from the African continent which has apparently remained fairly constant in its position. The boundaries of these proposed plates are defined by areas of high seismic activity and if we look at the map showing where recent earthquake and volcanic activity has occurred the plates are quite neatly defined. SEE MAP NO. 3.

Obviously as the world is roughly spherical, if expansion takes place in one area, then compression must occur elsewhere. Thus there are three possible types of plate boundaries.

- (1). **Expanding:** where the two plates are moving apart. Here new material must be continually added. Such boundaries are all on the sea floor, being zones of high volcanic activity. The best example of this type is the mid Atlantic ridge.
- (2) **Compressional:** where two plates are crushing into one another. Here one plate slides under the other whose edge tends to be crushed and folded by the process. Remember that gravity ensures the plates dip down and under rather than sliding over. Because of the crushing effect mountain ranges are thrown up as can be seen in the case of the Himalayas where the Indian plate is compressed against the Asian one.
- (3) **Tangential sliding:** the third possibility is sliding where one plate is moving laterally along the edge of the other. Which results in lateral faulting as can be seen along the west coast of North America, where the Pacific plate is rotating with respect to the North American one. This is the well known San Andreas Fault.

On studying these boundaries, we see that the major plates comprise -

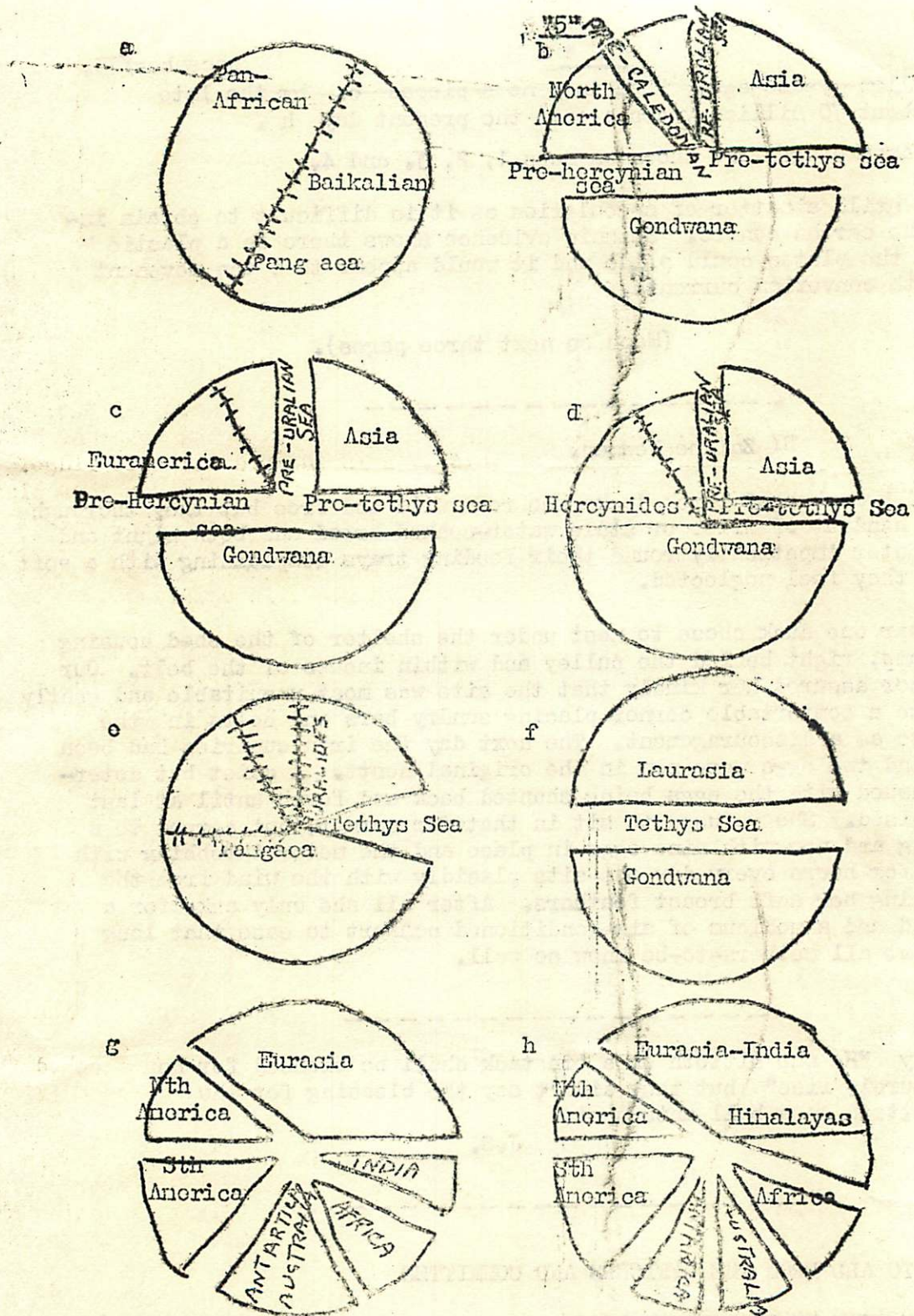
- (1) The African which is considered to be stationary
- (2) The South American Plate that is moving to the west away from Africa and overriding the minor plate in the S.E. Pacific.
- (3) The North American plate moving west in similar manner to the South American one and tending to crush the West Indian area in the process.
- (4) The Eurasian plate rotating slowly north from Africa.
- (5) The Indo-Australian moving N.W. crushing into the Eurasian and Pacific plates.
- (6) The Antarctic plate not well defined at present, which may have something to do with the cold.
- (7) The Pacific plate which is slowly rotating and is virtually being attacked from all sides. Several minor plates are associated with it chiefly in the Chilean and Indonesian area.

The only place where three plates are interacting is in the Afar Triangle in Ethiopia. Here it appears that a corner of Africa bounded by the Quatar depression and the Red Sea is cracking off and quite a lot of interest is being shown in this area. However as this must be about the most desolate place on earth such programs have their difficulties. In the associated area of the Red Sea, the Oceanographic ship "Glomar Trader" also discovered three troughs of deep sea brines and these may be the answer as to how extensive sedimentary ore deposits like Mt. Isa have been formed.

Picking together the information let us follow how these plates have moved in the past by using the simple Schematic diagrams (see the next page)

- a. Originally it appeared; there was one continental land mass Pangaea which originally cracked in the northern hemisphere apparently in the Cambrian approx 570 million years ago.





- b. Subsequently in the Devonian, about 390 million years ago, Europe & north America joined
- c. and then by the late Carboniferous
- d. some 300 million years ago this mass had again joined Africa. Asia joined in the late Permian
- e. about 225 million years ago when the whole mass was again united, but which subsequently commenced its present day break up firstly into two in the Mesozoic



December 75.

~~f. about 190 million years ago. Then into more pieces c. by the late~~  
~~Cretaceous about 70 million years ago to the present day h.~~

Details of the later stages are shown on maps 1, 2, 3, and 4.

The mechanism is still a matter of speculation as it is difficult to obtain information from the earth's centre. Seismic evidence shows there is a plastic layer over which the plates could slide and it would appear that the movement is associated with convection currents.

(Maps on next three pages).

# THE RESOLUTE DUCK

BY Zaidoe Newman.

We have a number of black ducks who roam wild and free but they thoroughly enjoy a small handout of mild or stale water-soaked bread and both night and morning they cluster impatiently round their feeding trays complaining with a soft hissing sound if they feel neglected.

This year one duck chose to nest under the shelter of the shed housing our irrigation pump, right behind the pulley and within inches of the belt. Our irrigation operator assured her kindly that the site was most unsuitable and gently removed the egg to a comfortable corner placing sundry bars and bolts in the favoured nest site as a discouragement. The next day the iron sundries had been somehow removed and two eggs were now in the original nest. A quiet but determined struggle ensued with the eggs being shunted back and forth until at last Mrs. Duck compromised. She refused to sit in that far corner, but agreed to a site halfway along and now with nine eggs in place and the motor throbbing with its regular beat for hours every day she sits placidly with the wind from the pulley belt ruffling her soft breast feathers. After all she only asks for a roof over her head and a modicum of air-conditioned comfort to ease that long waiting period that all mothers-to-be know so well.

They say "He who sitteth on a tin tack shall be blessed for he shall surely rise" but they didn't say the blessing for she that sitteth on a bull ants nest.

J.S.

## SEASON GREETINGS TO ALL FROM THE OFFICERS AND COMMITTEE

CHRISTMAS TIME IS FRIENDSHIP TIME

AT THIS SEASON OF GOOD CHEER - CHRISTMAS IS A "Lovely Link"  
 BETWEEN OLD YEARS AND NEW THAT KEEPS THE "Bond of Friendship"  
 FOREVER UNBROKEN AND TRUE.

DON'T FORGET THE CHRISTMAS BREAKUP - Sunday, December 21st at The Junction  
 COME ONE, COME ALL AND HAVE A HAPPY TIME.