



VOLUME 17 NUMBER 11

## A MONTHLY MAGAZINE PRODUCED BY THE

N.S.W. ABORIGINES WELFARE BOARD

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## FRONT COVER

The Riverina Advocate called this picture of four-year-old Janice Goolagong "Three-Ways tot with a touch of genius". Dawn agrees. Janice was painting at Three-Ways Bridge Pre-School Kindergarten near Griffith when an Advocate cameraman took this picture a few months ago.

## BACK COVER

Mr C. Taylor (left) and Doug Williams inspect some first-harvested potatoes grown in a self-help farming venture by the Aborigines Progress Association at Woodenbong (see story page 1).

(Picture courtesy Northern Star, Lismore)

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## Good start to self-help farming venture

This article, by Kevin Elsley, appeared in the Lismore *Northern Star* when the maize harvest was under way earlier this year. *Dawn* thanks the *Star* for permission to reproduce the article, which reflects great credit on the Woodenbong Aborigines Progress Association.

Woodenbong Aborigines have made a successful start to a self-help venture in grain and small crop production.

The Woodenbong Aborigines Progress Association last year obtained two loans totalling \$1,400 and with this money grew 30 acres of maize and 5 of potatoes.

The maize is being harvested and according to the buyer the quality and cleanliness is high enough for export.

Progress Association vice-president, Mr C. Taylor (left) and secretary, Mr V. Vesper inspect some outstanding cobs of corn grown with loan money from the Aborigines Welfare Board. These men obtained \$1,400 in loans after going to Sydney to meet the Welfare Board. Mr Taylor is one of two full-blood Aborigines at Woodenbong Station



The Progress Association has undertaken the venture with two main objectives:

- Better education for children at the station.
- Improvements on the station.

The association's secretary, Mr V. Vesper, said proceeds from the maize and potato crops would repay the loans and help toward sowing bigger areas next year if the land could be made available.

Mr Vesper said there were 60 acres available at the station for crops and his association wanted to see it all under maize.

## **Profitable**

He said there was no doubt about this year's efforts being profitable even after paying contractors for ploughing the land, the cost of seed and more contractors to harvest it.

The first potato crop grown by the Aborigines Progress Association has been encouraging, and plans are to put another area in next season. Here, Mr Taylor (left) and Doug Williams look over some of the first harvested. Five acres were grown with a \$400 loan from the Aborigines Welfare Board



(Two single-head maize harvesters have been hired to take the grain off).

The association's finances were "bed rock" at the moment, Mr Vesper said, but would get off the ground with the initial efforts of this year.

The maize and potatoes were being grown on a community basis for the benefit of the station.

There would be no distribution of profits for a few years, so that all funds could be ploughed back into the ground.

Mr Vesper and a vice-president of the association, Mr C. Taylor (one of two full-bloods on the station) went to Sydney in August last year at their own expense for a loan from the Government and for permission to use station land for grain and small crop production.

The two men put their case to the Aborigines Welfare Board which promised assistance.

## Pay its way

Two months after going to Sydney, the Board advised of a \$1,000 loan to grow 30 acres of maize and \$400 for potatoes and if successful it would consider further assistance.

Mr Vesper said there was no doubt about its success. He said the association may need more financial help again next year with an increased area to plant, but if the returns were comparable to this year's effort, the association should pay its way from then on.

He said the next move was for a loan of \$10,000 to buy essential machinery so Aborigines could work the land and harvest crops themselves.

Because they had no implements this year, they had to hire a tractor and driver to prepare the ground and to sow the seed and fertilizer.

Mr Taylor joined with Mr Vesper in stressing that there were many good workers on the station. They were able drivers and mechanics and could handle farm implements efficiently.

Six station residents are working on this year's maize harvest and this number could increase if the area can be doubled.

Mr Taylor said this type of farming should have started long ago at the station.

Mr Vesper said, "We're in business now. The purchase of a tractor is the next step."

The association's long range plan from this farming enterprise is better education to university

level for children, and improved living and recreational facilities on the station.

They have a hall—part of the old Cubawee school—which also serves as the church.

But the hall needs a lot of money spent on it.

And they want a church building rather than hold services in the community hall.

They have not lost sight of the prospect of one day owning their land.

Hybrid 128 maize seed was used, with 11:34:11 fertilizer at the rate of one bag to the acre.

Mr Vesper said the fertilizer was applied at the time of sowing and there had been no further dressings.

## **Used hands**

He said the harvest could have been greater had the rows been narrower than 4 ft, but this was the width that suited the tractor hired at the time.

Not having implements to weed the rows during growth of the crop, station residents resorted to the only tools available—their hands.

Proprietor of the purchasing firm Mr D. J. Holmes said it would be difficult to improve upon the quality and cleanliness of the grain

He sent the message "Beautiful corn, send more" to the Woodenbong association.

Mr Holmes said the yield per acre was estimated at 65 bushels.

One of the station residents said they did not want hand-outs from the Government all the time.

"All we want is the type of help given us already in the form of a loan that we can pay back, and then we will show we can help ourselves."

"After all, we have pride," he said.

The contractor planted the crop in rows 4 ft apart instead of the normal 3 ft and because of this yields had been reduced by 25 per cent.

The 5-acre potato crop was an experiment like the maize, and it too looks like paying off well.

Mr Vesper said more than half the \$400 loan for potatoes was spent on seed.

The harvest would produce enough small potatoes to seed further areas and to pay back the loan.

## Memorial trophy honours Euston Miles

Last year Gordon Adams ran second to Euston Miles in the first cross country run held at Woodenbong Central School athletic carnival. In July this year Gordon won the event, but the thrill of winning was made solemn by the trophy he recieved —which commemorates his friend and former competitor Euston Miles, who died in a sawmill accident earlier this year.

Mr Simon Miles, father of Euston, presented the cup to Gordon Adams. The impressive cup had been donated as a perpetual trophy by the teachers at Woodenbong school in memory of Euston Miles.

Mr G. Whale, a teacher at the school, said the teachers felt this was the most fitting memorial to Euston because he excelled in athletics.

The Miles Cup is the only trophy in the school that can be won by an individual: all others are house trophies.

Gordon Adams, first winner of the memorial cup, received the trophy from Mr Simon Miles, father of the boy it commemorates, Euston Miles. (picture courtesy Kyogle Examiner)



## Mining company will NOT disturb Moonee axe factory

The sand mining company Mineral Deposits Limited, which is working at several points in the Woolgoola area, has told *Dawn* that it will not disturb the Aboriginal axe factory at the northern end of Monee Beach (see *Dawn*, August, 1968).

The company's liaison officer, Mr D. K. Handsley, told *Dawn* that the company would not go anywhere near the location of the axe factory, and that as far as he was aware no other company had any right to mine in the area of the axe factory.

In a sequel to its story of I May, 1968 (which Dawn reprinted), the Coffs Harbour Advocate (6th May) quoted a telephone conversation with Mr Handsley: "There does not seem to be any possibility of this area ever being worked by a sand mining company," Mr Handsley told the Advocate.

Mineral Deposits Limited has been operating in the Cresent Head area for about 11 years and has now extended its operations into Coffs Harbour Shire.

The company's operations will extend from Emerald Beach to Pipe Clay Beach.

When in full production it will employ about 30 men and will work with a dragline and dredging equipment.

The raw material won will be road freighted to the dry mill at Crescent Head for treatment.

It is expected the company will operate on leases in Coffs Harbour Shire for about two years.

## Tweed Heads remembers Margaret Kay

The people of Tweed Heads have planned a lasting memorial to Miss Margaret Kay, an Aboriginal lady who established an Aboriginal museum and caused a sacred bora ring to be declared a National Park.

Mrs D. Harden, of Tweed Heads South, wrote to Dawn in August and said: "Miss Kay will not be forgotten at Tweed Heads, and when the tourist centre is formed on Greenbank Island many of the stones she always brought back from her walks will be cemented into a dreamtime pattern as an added and lasting memorial to this wonderful woman, who worked so untiringly to uplift her people."

All Tweed was very proud to have known a citizen such as Margaret Kay, Mrs Harden said.

Margaret Kay's Aboriginal Museum at Tweed Heads was well known to tourists and local residents. When she died without making a will, all her possessions had to be auctioned. But fortunately, Tweed Heads Historical Society—with the help of Tweed Shire and the local Apex club—was able to buy the museum pieces, although it could not afford the house.

## Bora ring

"Apart from her museum," Mrs Harden wrote, "Margaret located, and by her own efforts cleared, a bora ring and native well not far from her home, then badgered the Shire Council into having it declared a National Park, fenced in and preserved for all time as a piece of our heritage."

The uncleared growth was shoulder-high before Miss Kay started her work.

In August 1962, Dawn reported that Miss Kay had attended the opening of a bora ring at Burleigh Heads, Queensland. That ceremonial ring had been reclaimed by work of the local Lions club, and Miss Kay presented a sacred stone which was incorporated in the centre memorial cairn.

Miss Kay, soon after her return to the Tweed, was told that "her" bora ring had been officially gazetted as a reserve for the preservation of Aboriginal relics.

The then chairman of the Tweed River Historical Society, Mr R. White, of Murwillumbah, who made the announcement, paid a tribute to Miss Kay for her part in "discovering the ring".

A notice in the Government Gazette setting the site aside as a special reserve says it contains one acre, two roods, 30 perches.



Miss Margaret Kay in the sacred bora ring she "discovered" at Tweed Heads. The uncleared growth over the 1½-acre site was shoulder-high before Miss Kay cleared it. Tribal Aborigines from Richmond River used the ring during visits to tribes on the Tweed many years ago

Miss Kay's bora ring was shown to her many years ago by one of her relatives. The ring was used by many of her tribal relatives from the Richmond district during visits to tribes on the Tweed

## Bora ground restoration to attract tourists

Many Australian and overseas tourists would be attracted to the Darlington Point Aboriginal bora (ceremonial) ground if it was restored to its former state, said Mr A. J. Grassby at a meeting in the town in July.

The meeting was attended by representatives of Murrumbidgee Shire, the Murrumbidgee Irrigation Area Tourist and Development Committee, Coleambally Progress Association, Water Conservation and Irrigation Commission, Darlington Point Chamber of Commerce, Historical Society, Apex Club, and the chief of Airlines of N.S.W.

Mr Grassby, M.L.A. for Murrumbidgee, told the meeting that the MIA was on the eve of a new era in tourism. There were bright prospects of diverting hundreds of American tourists each year to the Riverina and MIA.

Captain Stuart Middlemiss, of Airlines of N.S.W., agreed with Mr Grassby and said that restoration

of the bora ground could result in regular "Jolly Swagman" flights from Sydney to Wagga, Narrandera and the MIA, carrying up to 2,000 tourists a year.

Similar flights are conducted to the Dubbo district, where the proprietors of an Aboriginal boomerang factory sell their products and show tourists how to throw boomerangs.

American and other overseas tourists, Mr Grassby said, came to Australia to see frontier Australia, not development in big cities.

The Riverina Weekly Advocate carried a full report of Mr Grassby's address to the meeting.

"Overseas visitors are intensely interested in Australia's unique flora and fauna and in the original settlers of the Continent," Mr Grassby said.

"In this connection the Murrumbidgee Irrigation Area has a unique opportunity to give a lead to the rest of Australia by restoring the largest bora or ceremonial ground in this State.

"This is located at Darlington Point. Its precise location has now been defined and is being pegged out."

## **Ancient** capital

Mr Grassby went on to say that it represented the heart of the ancient capital of the Waradgery nation, one of the biggest Aboriginal nations in New South Wales.

Because of the ceremonial ground Darlington Point had experienced floating populations of 8,000 in years gone by.

This was because warriors came to this district from as far afield as Yass.

## Three-clan tribe

Mr Grassby said that more should be known of the Waradgery tribe or nation, which occupied nearly a quarter of New South Wales.

The nation was divided into three major clans.

One was called Narrandera (sleeping lizard) and centred on modern Narrandera; another was known as Kutamundra (river trout), centred on Cootamundra; and the other was named Murrinbulla, which was located around Murrumburrah.

## From Yass to Hay

The Waradgery nation took its name from the word "wirai" meaning "no".

They were bounded on the west on the other side of Hay by the Ita-ita, to the northwest by the Burkinji, north by Wonghibon, northwest by the Kamilaroi, east by the Nungawal, and southwest, south and southwest by the Barrabaraba.

According to Mr Grassby, who has done a great deal of research work into the history of the Waradgery Aboriginals, the nation had 17 clans and totems for marriage purposes and was concentrated as a nation between Yass and Hay.

## Ceremony recalled

Describing from Hewitt's account in the 1870's of the calling of a barbung or gathering at the Darlington Point bora ground, Mr Grassby said the head man of the clan with boys awaiting initiation convened the gathering.

A messenger would be sent out to all surrounding clans and neighboring tribes.

Eventually all would gather for the ceremonies, which began with a general assembly, with all the clans and nations shouting in turn the name of the region from whence they came.

Singing, dancing and man-making ceremonies followed.

## Totem trees

Mr Grassby said the bora ground at Darlington Point originally had 100 or more tree trunks along the main path.

These were marked with totemic and clan designs, figures of various animals outlined the sand and soil.

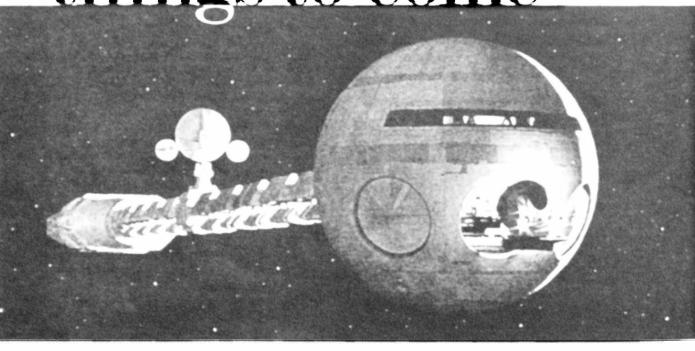
A sacred fire was kept going something like the Olympic flame—and there were depictions of the rainbow serpent which represented the elements of water or rain, the creation of the bounties of nature, the multiplication of human and animal species, and the maker of the rivers and the changes of the season.

Mr Grassby said the Waradgery people could have occupied the land in this region for 10,000 years before the Europeans arrived in Australia.

Coupled with the proposal to restore the ceremonial ground, Mr Grassby advocated a small collection of kangaroos, wallabies, emus, etc., as an added tourist attraction.

Recommendations adopted by the meeting mean that the MIA Tourist and Development Committee is to co-operate wholehartedly with Murrumbidgee Shire Council and district organizations to nominate a suitable bora ground for restoration. (There is more than one bora ground in the region.)

# Concerning things to come



## BY PROFESSOR JULIUS SUMNER MILLER

This exciting article was written especially for Currency, the monthly staff magazine of the Reserve Bank of Australia. Dawn warmly thanks the Reserve Bank and Professor Julius Sumner Miller for permission to reprint this flight into the future.

Any man who has seen the things and events of the half-century just gone by is led irresistibly to speculate on THINGS TO COME. I can remember—as a boy on the farm in my native New England—whilst plowing in the field with a single horse or chopping wood in the woods or digging potatoes—I can remember hearing—far far away—the quiet purring of an airplane—high in the sky and like a speck—and this was at most once or twice a year. Now the skies are full—so full indeed that these vehicles collide for want of space to fly! And then there was the apothecary—

the "druggist" we called him—who on the Doctor's orders ground this-and-that in a mortar with a pestle and the cost was a few pennies. A "heavy" chest was cured with a hot poultice of bread or bran and a "sweat". People died of diphtheria and consumption was the name for tuberculosis. There were no antibiotics.

Transport on the ground was by horse and buggy—this was how the Doctor made his rounds—and the horse was put into a panic by an occasional motor vehicle. The tires were iron hoops. Cookies and biscuits and crackers you got in the General Store out of a barrel. There were no fancy cellophane wrappers and packages. For molasses you fetched your own jug and filled it out of a cask.

Water we pumped with a pump by hand in the kitchens-or at a pump outdoors-and many had only a well with a bucket on a rope. To take a bath—and this was on a Saturday night!—we heated water in huge copper vessels on a wood stove. To go to The City-7 miles away-was a Great Adventure and it required planning. The movies—the cinema—were silent—the music banged out on a piano by a player up front. City life was only a bit more technological—they had paved streets and factories and a Woolworth's five-andten-cent store. They still had horse-drawn fire engines. The wintry nights on the farm we spent mending the harness—whittling an axe handle—making pillows out of feathers or corn-husks—and reading books—all by kerosene lamp. The recitation of these plebian events and things is without end for those of us party to them. But it was A Good Life.

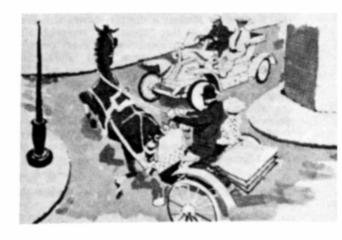
What now has come to be in this last half-century is staggering to contemplate. The body of knowledge which the human race has gathered up in the fifty years just gone by is more indeed than in all the centuries of human kind before. People—books—things—processes—travel—communication—foods—medicines—all are massive in number and complexity. That particular knowledge called "scientific" is so incredible that no man can claim command of any but the smallest fragment of it. There is no longer a Leibniz who has sovereign command of it all.

To give a sweeping view of it: We have penetrated the heart of the atom—we have sent vehicles to the Moon and to other planets-we have gotten messages from remote galaxies—we have drilled holes deep into the Earth to take out its wealth-much squandered. We travel with such speed that men from all corners of the Earth can be brought together within the daylight of a single day. Within seconds men can talk with each other across the most remote stretches of the Earth and the Sea. Books now number nearly in the infinite and medicines are as numbered as the grains of sand by the sea. Yet withal disease abounds — millions are unfed — unclothed — unhoused-schools and hospitals are wanting and men stubbornly persist in waging war! We need not say more of what we have and what we have not!

When now we come to speculations and anticipations the adventurous mind can proceed unbounded and unfettered. For my purpose here I choose now to set down merely a tabulation of THINGS THAT MIGHT BE. Having in mind the "present state

of the art" we can go into "unexplored" regions by extrapolation. But first some general commentary.

On this business of extrapolation—let us see what folly this kind of thinking—this kind of argument—can sometimes be. In 1900 we had—here in the U.S.A.—about one scientist for every 1,800 people. In 1950 we had about one scientist for every 300 people. We now have about one for every 100 people—maybe not quite this. In the year 2000 we must have about one for every 40 or 50 people. It is clear that very soon thereafter every man and woman and child here in the U.S.A. will be a scientist! The case is even stronger for physicists and for chemists! This is frightful to contemplate!



On the other hand let us look at the population of the World and how much we will have to eat: The world population is increasing at about 2 per cent a year. The world food-supply is increasing at most by about 1 per cent per year. Today three billion  $(3 \times 10^9)$  people have about seven trillion calories  $(7 \times 10^{12})$  to feed upon. This gives a person a little more than 2,000 calories per day. This is really a sparse diet. In 1980 we can expect four-and-a-half billion people  $(4.5 \times 10^9)$  with about eight trillion calories  $(8 \times 10^{12})$  and the daily ration comes to about 1,800 calories. In 1990 nine trillion calories  $(9 \times 10^{12})$  will have to feed nearly six billion people  $(6 \times 10^9)$ . A man will then have only 1,500 calories per day. And what comes in the year 2000? Seven billion people  $(7 \times 10^9)$  will have about ten trillion calories  $(9 \times 10^{12})$ —which is not enough to keep a man alive!

DAWN, Normber, 1988

This matter must be looked at with much circumspection for either man and his science and his technology will have to supply the food—or halt the population growth—or famine and plague and disease and WAR must decimate the people. As a last refrain on this subject: IF all the arable land NOW available on the Earth were now farmed and plowed it could support 30 billion!

If this problem of people-and-food-to-eat is not enough let us explore the very air we breathe. We may be running out of it! The arguments can go as follows:

A-Our atmospheric oxygen comes largely from microscopic unicellular organisms called diatoms which are abundant in and on the waters of the Earth. The pesticides which produced Rachel Carson's Silent Spring get into the waters and the rivers and find their way to the seas and oceans. The diatoms take up the pesticides and for all we now know their lifetime is sharply shortened. We do know that these tiny "creatures" replenish all of our free atmospheric oxygen about every twenty centuries. Maybe this great and wonderful "factory" operation is running down and we will run out of "air to breathe". Now add to this grim prospect this consequence: The fishes of the sea eat diatoms. The diatoms are full with pesticides. So now are the fish full with the dread stuff. We now eat the fish. We have absolutely NO knowledge of the long-range consequences of these affairs for human kind.

B-Our atmosphere is becoming lethal in still another way. We are lodging and loading it with stain and corruption-with contaminants and pollutants — a wickedness which hath indeed polluted the whole Earth—from automobiles and refineries and factories-and "smog" veils every city of the World. We might die from poisoned air-from asphyxiation. And the havoc which this polluted air brings upon all living thingslike plants-and materials of all sorts-is not yet calculated. One instant calculation does tell us very much-very very much: Driving your car about three miles uses up as much air as one million people breathe in the same time! Incredible! When this century ends the carbon dioxide in our atmosphere will be nearly 30 per cent more than now. The scarcest thing in all the world and that most needed by living things will be air to breathe! A further calculation on this CO, abundance suggests a further catastrophe: An increase in the CO<sub>2</sub> will give rise to a rise in temperature in our atmosphere by some few degrees—maybe 2° or 3° or 4°—or maybe more. This could melt the Polar Ice. The oceans might increase by as much as 2 per cent or so-and the

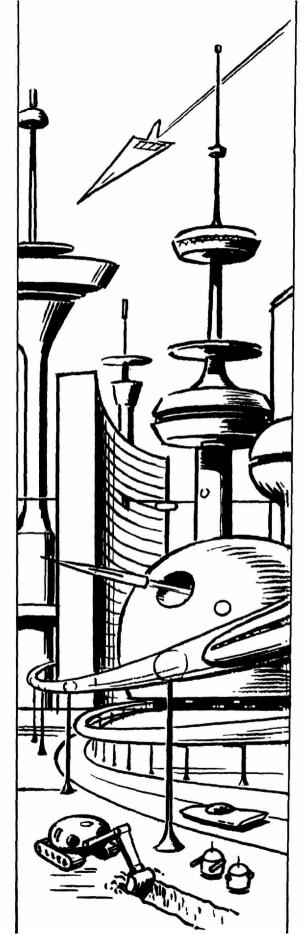
sea level would then rise about 150 feet! Ma Ma Mia!

An interjection comes to mind that I just cannot escape: Consider the tragic folly we have committed by putting a 300-horsepower "power-plant" under the hood—under the bonnet—of a one-ton-or-more vehicle. This horsepower is rarely usable and the pay-load is most often ONE lone 150-pound—10-stone or so—creature! What utter folly!

So then in the large view man must look ahead. It is now absolutely imperative that he do this for he is in command of events so colossal-so giganticso monstrous in scale that all the world can be changed. There are things that must be done and there are things that we must stop doing. Some things have consequences for human kind which are absolutely irreversible. Mistakes have been made because of lack of foresight and lack of knowledge and lack of planning. In many cases obviously-we just could not know. The city streets were designed for the horse-and-buggy. But we now have at our command men and devices that can detect dangers. But even this competence is risky—certainty in the affairs of men does not exist—for consider these utterances made by men of uncommon mind and vision:

At the beginning of this century Simon Newcomb said: "No possible combination of known substances or known forms of machinery or known forms of force can be put together in a practical machine by which men can fly through the air . . . ". And William H. Pickering with equal firmness put aside the prospect by this: "The popular mind pictures gigantic flying machines speeding across the Atlantic and carrying innumerable passengers . . such ideas are wholly visionary . . . and even if you could get across with a passenger or two the expense would be prohibitive . . . ". And Michelson—our Nobel Laureate in Physics in 1907—said that all that remains is to extend our findings to six decimal places . . . there is nothing left to discover! Even Vannevar Bush who headed up our Science in the Second Great War in the very middle of this 20th century frowned on the possibility of sending rockets from one continent to anotherin spite of the German competence to do this already! And in 1956 the British Royal Astronomer said: "The prospect of space travel is utter bilge". So we must really be wary of even the geniuses! After all—they are just people too.

Now then to some speculations. We submit these without much commentary mindful that "debate" can be unending. Nor do we propose a "time-scale". Some are certain in the next decade; some most certainly by the year 2000—only 30



years away; some within a hundred years most assuredly. And even those which are "far out" I am still sure will come to be for I am secure in the view than whatever the human mind can conjure up man can do.

- 1. On life expectancy: At the beginning of this century—about 1900—our life expectancy was less than 50 years. About 1950 it came to be 65 years. It is certain that men will live—in the technologically-advanced regions of the Earth—to 100 years of age in the next half-century. And living to 150 years is not a rash guess. The advances in pediatrics and in geriatrics and our understanding of the aging process will make this possible. If now life is made more certain at the beginning—and death at birth is rare—and life on the aging-end is extended—we are led to a dilemma—loud and clear. Is there room on the Earth for all these living creatures? An elementary calculation reveals a startling picture: There will indeed be no room!
- 2. Birth control: Immediate—reliable—available throughout the World. A change in the attitude of The Church and the mores of the peoples.
- 3. Transplant of human organs commonplace with "banks" of these abundant; use of animal organs in humans; new sight for the blind—new hearing for the deaf—by means not yet heard-of—by "signals" to the brain; new reading devices for the blind translating print into sound; removal and freezing and grinding of corneas to correct defective vision; transplant of human teeth.
- 4. Mechanical replacements and substitutes for human organs and limbs; motorized arms and legs linked to the brain; artificial skin; skin grafting by spraying on chopped-up skin.
- 5. Immunity against all diseases and all illnesses for the lifetime. Elimination of all the great diseases—cancer and heart disease; fabrication of new viruses to kill bad ones.
- 6. Bloodless surgery—a glue instead of sutures—mending of bones by "welding"—new anesthetics and new methods of anesthesia—electrical?—a new microscopy; new temperature-taking devices.
- 7. Diagnosis by automation—the whole history of the patient is punched in and the judgement punched out by the machine.
- 8. Genetic control of the sex of the unborn.
- **9. Genetic control** of the human species and rejuvenation; control of DNA and the elements of heredity. Man will direct his own evolution! Plenty of worry about irreversible genetic mutations!

- 10. Laboratory conception and creation of plant and animal life; "life in a test-tube"; new species—hybrids; artificial gills for humans to breathe underwater; ultimately a new homo sapiens; change in shape of fruits and vegetables; normal animal and human conception with fetus grown outside the uterus so women can forego carrying the unborn! NOTE: square pineapples are now grown; the wool production of sheep has been increased by injection of protein directly into the animals fourth stomach; the chicken and the turkey have now been crossed—called a "churk". Artificial insemination commonplace in animal and human.
- **11. Suspended animation** until the disease is curable—"deep freeze" tanks for years—even centuries—cryogenic (freezing) interment.
- 12. Synthetic foods. No reason why the cow must eat the grass and then we eat the cow!
- 13. Food and minerals from the oceans abundantly; undersea farmers; "ocean farming"; fish herded and raised as cattle; kelp and algae.
- 14. Exact weather forecasting—made possible by satellite data; climate "control" by heat from nuclear generating plants. NOTE: Calculation shows that the smog of Los Angeles could be "lifted" by a 100-megawatt nuclear reactor!
- 15. Undersea installations and laboratories—in glass spherical chambers; underwater satellites.
- 16. In Agriculture—potable (drinkable) water available to all the Earth by conversion of seawater by nuclear energy; man-labour completely replaced by machine; robots with arms and legs and eyes and voice; extension of agriculture to Polar regions; all the great deserts in bloom; several crops planted at the one time by coating the seeds and delaying the germination; melting of the glaciers to provide water in dry years; protection from frost by chemical spray.
- 17. On Transport—New modes of locomotion not-yet-heard-of. Man walks birds fly fishes swim worms crawl squids and octopuses (Cephalopoda) go by jet-propulsion; The round wheel obsolete—unround—flexible—deformable; land vehicles that can fly and travel and travel on the water and under the water as submarines; earth-travelling vehicles air-supported.
- 18. Transport on the Ground: New trains with enormous speeds; moving sidewalks in the cities and over intersections; highways with automated-control of the vehicle by imbedded mechanisms;

- internal-combustion engines outmoded and replaced by both electric power and nuclear energy; NO vehicles in the cities; "far-out" cars get airborne at pleasure; new road materials; new "stuff" for tyres; underground highways; illuminated sidewalks.
- rg. Transport under the Ground: More tunnels with fast vehicles; tunnels connecting cities on the remote side of the Earth. NOTE: ALL one-way journeys in these tunnels—by "free-fall"—whatever the separation of the places—Sydney and London—New York and Paris—will take exactly 42.2 minutes!
- 20. Transport in the Air: Individual power-supply by ballistic rocket devices strapped to the back for short travel—as men going to work; huge transport planes carrying thousands of people and hundreds of tons of freight utilizing nuclear energy; lunar flights commonplace; lunar installations with moon-cars for travel; interstellar travel in the far-distant future; ion vehicles; discovery of "intelligent creatures" abundant elsewhere. NOTE: The dust in interstellar space has been found by spectroscopic analysis to contain chlorophyll.
- 21. Transport on the Sea: Enormous vessels of millions of tons displacement—powered by nuclear energy; very high speeds.
- 22. Transport under the Sea: Enormous underwater (submarine) vessels for transport of people and goods.
- 23. In the home: Automation complete in the kitchen; disposable dishes; disposable clothes; air-conditioned garments; heating systems built into the walls and floors; electric-heated floors; 3-dimensional television with micro-micro-circuits and wall-size screens; TV received directly from satellites; paper houses with interwoven stuff; wood obsolete; seeing-by-telephone communication over all the World; homes built of yet-undiscovered materials of great flexibility and long life; movable walls; new materials produced by nuclear reactor radiations.
- **24.** In communication: New yet-unheard-of means of message-sending; private communication by tuning in to another man's brain; signal transmission *through* the Earth; use of the Moon for reflected signals.
- 25. A substitute for paper.
- **26. Books and magazines and newspapers extinct:** Information and news read in code and translated by home machines. NOTE: Most of the books of the world are already rotted away.

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- 27. Utilization of Gravity Waves: Insulation against gravity.
- 28. Lighting of the Earth by satellites hovering above; with 24 hours of "daylight" a new agriculture—a new way of life for people and animals; a new manner of living.
- 29. In the food stores and shops: Just as 99 per cent of the things available today were not known in 1900 so we will have an endless array of NEW things; looking-at-and-selecting will be by push-button.
- 30. Harnessing of the Tides: By nuclear energy. NOTE: This will change the length of the day and may lead to *irreversible consequences*!
- 31. Leisure among the Working People: All menial labour outmoded; leisure extensive and dangerous; four-day work-week or less; less than 10 per cent of the people—of the population—will work! People will do their work at home and deliver the output by telecommunication.
- 32. New Schooling System: Schools in the ordinary sense less and less and ultimately no more; school population too massive for housing in the usual way; schooling in the home by television or some-such. NOTE: The present rage in the schools to provide students with separate carols—private enclosures—for study by private "information retrieval"—a flagrant waste for only one student at a time can be accommodated by the machine. It is a waste of fortunes for an education process that cannot work!
- 33. Understanding of Sleep-Fatigue-Thought-Memory: Leading to better utilization of human resources; cybernetics on a large scale.
- 34. Learning and Memory: Stimulation of the brain—chemical and electrical; symbiotic link of brain and computer—as is done with apes and rats. NOTE: Learning is now transmitted to untrained rats by injecting them with brain material from trained rats. The brains of deceased geniuses may be useable! Loss of memory in old-age—senility—eliminated.
- 35. On Crime: Change of criminal personality by chemicals; odor-sensitive devices to identify the "chemical signature" of people; voice prints; identification by hair; anesthetic dart-gun to catch criminals; inflatable highway barricades.
- 36. A substitute for fire.
- 37. A substitute for glass: monomolecular-thin metals.

- 38. Bird-life extinct.
- 39. Revolution in mail and its delivery.
- 40. Universal use of Metric System.
- 41. Command and control of Friction.
- 42. Extension of the Electromagnetic Spectrum which we now know.
- 43. Factories in Space utilizing the airless and the weightless environment.
- "Death-Ray" devices—electro-44. IN WAR: magnetic or acoustic; biologic-quieting of the enemy without killing; controlled infectious diseases to silence the enemy—by aerosols (aerobiology). NOTE: The atom bomb on Japan weighed about 10,000 pounds and it killed less than 100,000 people. A milligram—a very speck—or less of chick-embryo tissue innoculated with the right "stuff" can infect billions and kill millions outright. OR-a shoebox or sugar bag of concentrated food poisoning agent-like botulinum toxin-put into the drinking water; or the delivery of parasitic micro-organisms like Rickettsia whose biological position is still uncertain (it is neither virus nor bacteria). NOTE: THE QUESTION whether it is LEGAL or adhering to THE RULES OF WAR is a stupid question!
- 45. On Defence and Offence: A: Any defence system can be penetrated and over-powered; B: Offence always has the advantage; C: There can never be an effective antimissile system.

We conclude this discourse with two overall generalizations:

One: The great movements in human achievements from here on will be more in matters biological than in the physical. We now have at our command a vast scientific and technological competence for altering things living and lifeless for changing human beings and the course of Nature.

**Two:** The "command" of the World now rests with the people whose skins we call "white". The forces which have produced this are well-known.

But there is no reason why this should be for ever-lasting! It may well be that the role of the White Race diminishes with time and that command of the World comes into the hand of People of Colour—Black and Yellow. They have both time and numbers on their side. This is not to suggest that this Scheme of Things—should events move in this direction—is one to be feared or viewed with alarm but rather to give us direction in our own Way of Life.

## ADDENDA

Some random things come to mind:

- A—In the new microscopy we shall certainly SEE molecules and atoms and nuclei and the so-called "fundamental" particles. Seeing these will lead to better knowing how to put them together—as a child with building blocks. Our competence to synthesize will be staggering. No end of NEW things will come into being.
- **B**—With life extended on the aging end—to 100 years or to 150 years—or even more—a great moral question must arise: What do we do with the old? If the choice is forced upon us we can stop the birth of the new—but what will we do with the old?
- **C**—When laboratory conception of human life is accomplished—"life in a test-tube"—an enormous *theological* question arises.
- **D**—The discovery of "intelligent creatures" elsewhere will also pose great problems for the

- theologian. "Religion" will have to have a new view.
- **E**—Speculating on a *substitute for fire* leads to this line of thought:
- (a) How would our own culture—our own way of life—our own "civilization"—have gone had WE not gotten a command of fire?
- (b) Suppose the "intelligent creatures" we do find elsewhere have NOT had fire in *their* Scheme of Things. What is likely to be *their* Way of Life? For us FIRE is a necessary ingredient.
- F—On SCHOOLING OF THE YOUNG: A child now begins his "formal" classroom life at about age 5 or 6 and—in the U.S.A.—has some 12 years at the public purse. This is utter folly! Formal schooling—formal "instruction"—can begin at age ONE or earlier! All that is now done in the 12 years now practiced can be done in 6 years or less! We subject the young to flagrant waste of their best years to learn.

## Your Career—Dental Nursing

This information about dental nursing has been extracted from Background to Careers, published by the Vocational Guidance Bureau of the Department of Labour and Industry.

The duties of the dental nurse include preparing the surgery for each new patient, assisting the dentist at the chairside, and carrying out general duties such as checking instruments, and replenishing supplies that are frequently used. In addition, she is often expected to act as a receptionist/secretary for the dentist. An ability to type is therefore desirable.

Although it is not essential to undertake a training course, many dentists prefer to employ girls who are willing to do so.

**Training** The training course is conducted by the Dental Assistants' Association of N.S.W. and involves attendance at evening lectures once a week for about 9 months. A correspondence course is available for those who work or reside outside the County of Cumberland.

The course covers the fundamental principles on which surgery routines are based, and includes subjects such as Office Management, Dental Anatomy, Preventive Dentistry, Bacteriology and Sterilization, and Chairside Assisting. A certificate is awarded on successful completion of the course which entitles the holder to a wage margin of \$1.50 a week.

Entry Girls who wish to enrol in the course should be at least 16 years old and have completed third year at school (or alternatively, have worked as a dental assistant for 3 years). All students, no matter where they live, must have at least 3 months' experience in a dental surgery before undertaking the course.

Further details concerning the course can be obtained from The Course Supervisor, Box 4427, G.P.O., Sydney. Applications should be sent to that address before 1st February. Fee for the course is \$31.50.

**Prospects** The award rate for dental assistants is \$13.64 a week at 16 years, rising to \$28.20 a week at 21 years (plus \$1.50 margin if qualified).

## Daily care of your baby

If a small baby cries, it is usually for a good reason. It is his only way of letting his mother know that something is not quite right. Look for the cause of his discomfort—whether wind is troubling him or a wet napkin irritating him—make sure his bed and clothing are comfortable.

Picking him up may soothe him temporarily, but it will not solve his problem. If it is the only help he can expect he will continue to cry for it, and this will take up a lot of his mother's time.

If he is very upset he should be nursed and comforted, but it is important to discover his problem and set it right, so that he can get the sleep he needs.

## Clothing

Most babies suffer more from being "overclothed" than "under-clothed". A good rule is: in winter keep the baby warm but not hot; in summer keep him cool but not cold. In cold weather, the first clothing should be of woollen material, a mixture of silk and wool and nylon mixture.

Nylon, bri-nylon or cotton can be suitable provided the yarn is fluffy and the texture loosely woven; these can be particularly valuable for the baby who gets skin irritations from wool.

New garments or those which have been stored away from moths should never be put on a baby until they have been thoroughly washed, because some babies may suffer a marked reaction to certain insecticides.

In hot weather it is important not to over-clothe the baby: a cotton singlet and napkin are all the baby needs on a hot humid day; excessive sweating is bad for baby as he tends to loose too much fluid in this way.

In extreme heat waves the baby is better with no clothes at all. Bootees also should be removed because sweating of the feet can be harmful.



Remember too: in hot weather the baby needs extra drinks just as you do.

It is often difficult to keep older children properly covered during the night. You can overcome this by using a sleeping bag made of double thickness washing flannel (see illustration). If the bag has plenty of room, the baby can kick in it as much as he likes without becoming uncovered.

## Shoes

When baby is beginning to walk he should wear soft-soled kid shoes. After he learns to walk he should have suitable shoes with firm soles and broad low heels.

If any redness appears on the feet, it generally indicates that a larger size of shoe will soon be needed.

The soles of new shoes should be roughened with sandpaper to avoid children slipping. Socks or bootees which have become shrunken during laundering, or outgrown, should be discarded.

A good way to ensure that the baby's first shoes are comfortable, and do not restrict his feet, is to make the shoes from glove leather or an old soft felt hat.

To make the shoes, place baby's foot on a piece of paper, and pencil the outline of the foot. For the upper part of the shoe make use of an old shoe as a pattern.

Remove the sole and open the back seam. If the seam which joins the sole to the upper part is sewn on the outside of the shoe, baby will have a comfortable shoe.

## **Important**

It is extremely important that children should wear well-fitting shoes. Mothers should buy their children's shoes with great care, making quite certain that they are long enough and broad enough not to cramp the foot in any way.

The heel should be deep enough to fit snugly at the back. A good way to test whether the shoes are right is to place the child's heel into the heel of the shoe so that the rest of the foot is resting on teh outside (top) of the shoe. If you can see half an inch of shoe extending beyond the child's foot all round the toes, then the shoe is the right size.

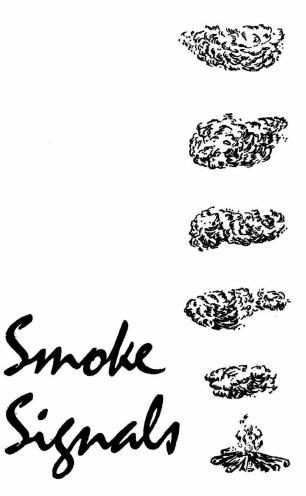
If the toes reach to the edge of the shoe, the shoe is too short; if the shoe cannot be seen on either side of the child's foot, the shoe is too narrow.

An alternative method is to trace the outside of the child's foot on soft cardboard, cut out, and use as a guide when buying shoes; if the cardboard curls up around the edges after being placed in the shoe, then the shoe is not large enough.

Sandals are not suitable for everyday wear or at any time for very young toddlers. Every child should be given at least one pair of good, strong, lace up shoes of the correct size, with flat, broad heels. These will support the foot and ensure correct development.

If there is no danger of the baby's feet being injured, for example, from broken glass, pins, etc., it's a good idea to let the baby go barefooted.

(From "Our Babies", published by the N.S.W. Department of Public Health)



TIP FOR THE MONTH Fill scratches in furniture by rubbing with a walnut. Finish the touch-up job with furniture polish.

▶ Griffith Aborigines Advancement Organization urgently needs more members. President E. T. Linacre, in the annual report of the G.A.A.O., outlined some of its activities, but stressed that more could be done if membership was larger.

▶ The sudden death of Mr Harold Ernest Duke in July came as a deep shock to his family and many friends. Mr Duke was only 51 years old. Mr Duke was born at Terry Hie Hie and spent most of his life in Moree. He worked for many years in pastoral and building industries, and was a keen follower of sport. Mr Duke represented Moree in football and was a keen club man for the Shamrocks team. He is survived by his widow, three sons and two daughters.

- ▶ In Mexico full houses have been attracted to an exhibition of historic films about Aborigines. The Mexican Government has arranged screenings throughout the country for the 20 films, which were the Australian Film Unit's offering to the cultural projects associated with the Olympic Games.
- This story about sleepwalking is hard to beat. Fourteen-year-old Craig Elliott, of California (U.S.A.), was sleeping in his parent's caravan truck travelling at 50 miles an hour when he rummaged through the refrigerator, and strolled out the door—on to a busy expressway. He suffered only minor bruises. A police car right behind the caravan truck carried him to hospital. His mother said: "Craig's been sleepwalking since he was three, but nothing like this ever happened before".
- ▶ In Youngstown, Ohio (U.S.A.), you would be fined \$5 the first time and \$10 every time after that for walking in bare feet. But only if you are over six years of age. A city councillor said: "It's a safe, sensible and hygienic law that has already attracted a lot of attention from other cities which are considering copying the law. It's designed to stop the spread of athlete's foot, lockjaw and general foot diseases." So there!
- ▶ Evonne Goolagong, the winner of many tennis championships, has been given the celebrity treatment. In September the Sydney Building Information Centre displayed a room designed in Evonne's honour, featuring everything a girl could want in her own private room.
- ▶ Last month Dawn told you about the "Image", a pop group of five talented Aboriginal musicians from Erambie Aboriginal Station, Cowra. Mr G. Sullivan, Griffith Area Welfare Officer, said the group's instruments were valued at \$1,000. The boys use five guitars, two amplifiers, microphones and a set of drums; they are getting plenty of work. Last month we didn't have the photo. Now you can see the "Image". Left to right (front) are Joe Bugg, Jimmy Williams, Lindsay Connelly, and (back) Sandy Glass, Freddy Glass and John Bugg (manager). (Cowra Guardian photo).
- ▶ An eight-year-old dolphin at Taronga Zoo (Sydney) died in September after being "fed" fishhooks and bobby pins. Zoo director Mr Ronald Strahan made an urgent appeal to the public not to feed the animals. "People throw all sorts of things into cages to see if they can get some sort

- of reaction out of the animals," he said. A postmortem of the dolphin revealed 11 bottle tops, 12 coins, one pound of road metal, one rubber, one pump washer, two pieces of plastic, two pieces of broken glass, two buttons, fibre from a tree and nine lengths of wire mesh. The dolphin, Sheila, was one of two at the zoo.
- More than 100 men with tranquilizer guns, special cages and anti-poison venom will try to save 10,000 animals and insects which will be flooded out of their homes as a 500-square-mile lake is formed behind a new dam in Venezuela (South America). The men have about two months to save animals ranging from jaguars (like tigers) to poisonous caterpillars and spiders, which will be able to find new homes in flood-free areas.
- Chief A. Y. Eke, registrar of the University of Lagos, Nigeria, learnt to throw a boomerang in Sydney late in August. He was attending the Tenth Commonwealth Universities Congress, at Sydney University, and used between-session breaks to practise on the university oval.
- Douglas Rankine, 32, of Melbourne, has become perhaps Australia's first Aboriginal male model. He was one of eight finalists in a mannequin academy's contest, and a large Melbourne store hired him for spring fashion parades. Mr Rankine works as a storeman-packer but his employers agreed to give him time off for the parades. He hopes to become a full-time model.

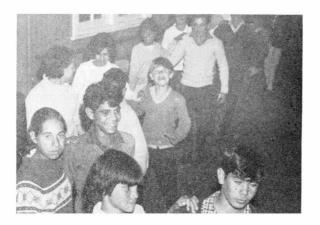
## Youth club popular at Moree

Right Bottom: Tom Nean (left) looks ready to take on all comers in a table tennis match at the St Pius X Youth Club at Moree

Right Top: Some of the girl members of the 100-strong club, which meets each Tuesday night in St Philomena's Hall

Below: Square dancing and ballroom dancing are part of the activities at the club, which is run by the Daughters of Charity, Moree.

(Pictures courtesy Moree Champion)



Membership of the St Pius X Youth Club at Moree is "at the 100 mark", and each Tuesday night the young people who come have a great time, according to Sister Brendan, of the Daughters of Charity.

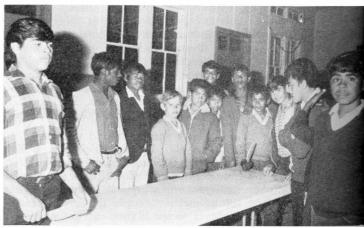
Sister Brendan says that the club meets in St Philomena's Hall, West Moree, and is conducted by the Daughters of Charity.

The young people enjoy the activities, which include singing, games, square dancing and ballroom dancing.

In a letter to Dawn, Sister Brendan said: "The sisters run their International Bus and pick up these lads and lassies from the Aboriginal Station, Stanley Village and The Row, while others living in flats nearby come on foot.

"Learning to mix with others on a more social footing that at home is part of the club's aim."





## Pete's Page

Hello Kids,

Last month I showed you what the kids at Cummeragunja School were doing. This month you'll see some of the things going on at Nanima, near Wellington.

Mr J. B. Cahill, supervisor of Nanima Aboriginal School, said that Education Week early in August attracted many proud parents to Nanima School. They came to see some of the skilled needlework done by the girls in the art and craft room.

Quality of the girls' work was high, Mr Cahill said, and some of them made their own clothes, and extra clothes for their younger brothers and sisters.

All the Nanima children, from kindergarten to sixth class, proudly showed their parents examples of their school activities.

During Education Week the Nanima children visited the Wellington Branch of the Commonwealth Bank, where they were showed what happened to the money they banked at school. They saw the things that happen in a bank, and were pictured holding \$10,000.

## Athletic carnival

Mr Cahill said in his letter to me that Nanima School won the march past for the second year running at the Wellington District Public Schools' Amateur Athletic Association's annual sports meeting, held in August.

Events were keenly contested, and many Nanima parents went to the carnival with their children. Ann May was named Junior Girl champion of the day, and, with Reg Stanley and Patrick Riley, carned a place in the representative Western Area carnival held a few months ago.

That's all for now kids.

See you next month.

Pete

Nanima pupils showing the form which won them the march past for the second year in a row at the sports meeting at Wellington in August



Lynette Elemes and Eddie Stanley, captains of Nanima School, hold the march past trophy which Nanima won.
(Wellington Times picture)

At the Commonwealth Bank in Wellington during Education Week in August the Nanima kids got a taste of money—\$10,000 of it. Back row: Miss D. Fuller, Lorraine Kelly, Noelene Ah See, Cheryl Dobson (obscured). Front: Deborah Cooper, Charles Stanley (holding a tray of 200 pieces), Ann May, Deborah Toomey (holding tight to the \$10,000 in notes). Denise Kelly, Christine Elemes, William Carr, Reg Stanley (he's got a bag of notes and coins, too), Dennis Toomey, Kevin Stanley, Mary Ann West, Eddie Stanley and Andrew Bell. (Wellington Times picture)





