NORTH EAST PASSAGE

For 26 days in August/September 2011 Julie, along with 48 other passengers, traversed the Russian Arctic, a voyage of 4,411 nautical miles, encompassing 1 ocean, 6 seas and 9 time zones. Our home for the adventure was the Akademik Shokalskiy, an ice strengthened vessel built in Finland in 1982 and named after the respected oceanographer, geographer cartographer. Incidentally this is the same ship that was stuck in pack ice in Commonwealth Bay recently. On our voyage the Captain was adamant about avoiding the pack ice as it cost \$4000 per day to engage an ice breaker for a rescue! The vessel was powered by 2 x 6 cylinder engines, 1500 hp each, using 6 tonnes of diesel per day.

We embarked after a city tour of the ice free port of Murmansk. A rather grey place of 320,000 people engaged in nickel, phosphorus, fishing, oil, gas and the Russian navy. It enjoys only 18 cloudless days a year and along with a daily listing of the temperature and wind strength also displays the radiation levels. Didn't wish to linger long here! There was a huge monument to the 30 million who died in the Great Patriotic War and others for the submarine 'Kursk' and the many who continue to be lost at sea.

Daily life on board was busy and varied, food, life boat drills, food, lectures on all aspects of our travel - history, exploration, geology, flora, fauna, birds, mammals, ethnic groups, food, films, food, relax in the sauna, food and off course excursions in the zodiacs and for the hardy, kayaks. These we took up to 3 times daily, anything from 5 am to 11pm. Sometimes negotiating the transfer from gangplank to zodiacs was easy but at others it was frightening, everything rising and falling in the rough seas in an uncoordinated fashion. There was only one day where our leader deemed it was just too dangerous to disembark, huge seas, gale force winds 8 - 9at 42 knots, the ship only able to progress at 5-6 knots.

On some excursions we cruised along bazars or bird cliffs but on most we went ashore.

Our Russian hunter armed with flares and gun went ahead to scout around for polar bears lurking near the intended landing site and remained on the highest point to keep watch for the duration. Most islands were not populated now but had been military posts in the past or were visited by indigenous peoples from the mainland, some were weather stations still with just 2 or 3 people and some had been declared National Parks in 2010 with the first Rangers commencing in 2011. One of the Rangers first jobs was cataloguing the vast accumulation of left over rubbish, tyres, rusting drums and machinery that was going to be removed the following summer. No mention was made of the ruined buildings. They seemed keen to show us around.

Some islands were flat, some appeared so but in reality were very uneven as the alternate freezing and melting created upheavals. We strolled along stony shores covered in driftwood, climbed small hills covered in snow and ice, avoided sinking in mud and swamps, negotiated hummocks across the tundra, hoped across boulder fields, found snowy owl perching places, polar bear dens, historic Inuit dwellings and bones, 10,000 - 6000 year old Mammoth tusks and teeth all the while admiring wild flowers, seeking out birds, being surprised by majestic polar bears, blue fox, arctic foxes, squirrels and hare, northern pika, lemmings, reindeer, brown bear, walruses, harp, bearded, ringed and the most elegant ribbon seals, minke, gray, humpback and beluga whales, dolphins and the most unexpected of all a wolverine. Confirmed bird species numbered 52, mammals 23, plants 65 in the High Arctic with many more unidentified and the too numerous in the Chukotka region.

36 excursions were made on and around the islands of Novya Zemlya, Osirova Oranskie, Yedinenya, Severnya Zemlya, Novosibirskiye, Kreslovskiy, Pushkaryov, Chetyryokhslolbovy, Wrangel, Kolyuchin and Ittygran. Followers of arctic exploration will be familiar with the ill prepared ventures involving UNESCO listed Wrangel Island in particular. They make for exciting reading today but I found it most evocative standing at a monument to those explorers

and speculators who had lost their lives, a weather greyed upturned wooden boat topped with an Orthodox cross, light fading, rain approaching, the only sounds being of wind, waves and whales blowing off shore.

One of the highlights of this Arctic trip was the opportunity to visit indigenous villages. We were given the warmest welcome when we landed unexpectedly at isolated Ayon Island. A village of 200 reindeer herders and subsistence fishers. We were invited into houses, the school, the shop and bakery, enjoyed an impromptu dance and drumming, stopped for 'conversations' in the streets. It had been 3 years since the last visitors, Canadian scientists. The children didn't cease smiling when we distributed fresh apples and oranges. This village only has connection to the nearest town 90k away via dog sled in winter and the occasional aeroplane.

At Vankarem village we learned of a WWF program assisting people to live with polar bears without killing them [or being killed] and viewed a haulout of 3000 walrus.

Into the Bering Strait and a halt in the harbour while officious officials denied our entry ashore at Uelin village. The 3 hour wait was filled with watching the locals hunting walrus. Their quota is 100 per year.

Technically we had completed the North East Passage. Our Captain said that even 10 years ago this would have been blocked by ice now and we would not have been able to complete this passage nor visit Wrangel Island. Other evidence of changing climatic conditions we observed were the number of polar bears stranded on land instead of being among the ice floes further north where they would be feasting on seals, laying down the necessary fat to breed and survive winter. Because the ice is melting earlier the young are not old enough to leave and by the time they are the ice has gone. We did not appreciate how undernourished the land locked bears were until we travelled to the ice floes where the bears were astonishingly obese. Earlier in the voyage we went as far north as 80 degrees and did not encounter ice.

The next village was Yanrakinnot where we picked water berries and were treated to

displays of traditional skills on the sports ground, the perimeter being an arrangement of whale bones.

On to Ittygran Island and the UNESCO listed Alley of the Whales, estimated to be a religious site some 4,500 years old.

The voyage ended at the town of Anadyr from where we flew back to Moscow and our separate ways. This was indeed an adventure that I have only touched on here. High lights were many – on a totally calm and sunny morning witnessing a 'feeding frenzy' of thousands of short-tailed shearwaters with 8 whales in their midst, being surrounded by horned and tufted puffins, on a thick foggy morning walrus emerging from the sea beside us, watching a polar bear negotiating a bird cliff, another eating a seal on an ice floe and another shaking off water like a dog.

The arctic had many explorers and adventurers that make for fascinating reading now that many books have been translated into English. It was a thrill to recognize names and places and the privilege of being able to travel in these remote regions in such comfort today.

I have species and book lists and map if anyone is interested.

Julie Parker

GEOLOGICAL UPDATE 2013

On December 15 at the Bunurong Environment Centre in Inverloch, Mike Cleeland of Bunurong Coast Education outlined some palaeontological events of 2013.

In October Australia Post released its first issue of *Australian Age of Dinosaurs* stamps since 1986. Of the six stamps, four depict Victorian specimens: an amphibian *Koolasuchus cleelandi* (named after Lesley Kool and Mike) found from San Remo to the Inverloch dig site, *Qantasaurus* sp. also from the Inverloch dig site, and dinosaurs from Kilcunda and the Otways. Australia Post also produced a poster, a booklet by Tom Rich (available at post offices and through their website), medallions and envelopes.

Since the opening of the Inverloch dig site in 1992, 15,000 bones have been removed. However 2013 was probably the last dig. As from February 2014 the dig is likely to revert to the Otways. An oxygen isotope analysis of a bone found in a calcite concretion indicates a yearly average temperature of 27°C (it's now 14°C) which is remarkable for this location as it was at 80° south latitude then. An honours geological student has used a computer synthesis of quadcopter and camera to streamline mapping of Cape Paterson. And a scan by a synchrotron of a tiny mammal jaw has enabled a fifty times enlarged model to be produced.

Inspired by Tom Rich's realization that an excavation in China exposed a former quiet lake and fossils similar to the Koonwarra dig site (but with twelve dinosaurs), the "Koonwarra fish beds" were re-opened in April. It's now about 115 million years since it was that quiet lake which accumulated about 7 metres thickness of sediment built up at the rate of about 2 mm. per year. Six feathers were found, and the combination of a structure in a leaf axil and angiosperm pollen suggests we may have the world's earliest flower. There were no dinosaur remains, but about ten times the number of insects as there were fish.

On French Island where the rock type is also Cretaceous sediment there are leaf fossils. In a nodule is a specimen with articulated bones such as neck and vertebrae, a rib cage, a skull with enlarged optic lobe (suggesting a lot of darkness) and possibly stomach contents. There is evidence of a ceratopsian (horned dinosaur) at Kilcunda and six turtle vertebrae at Eagle's Nest. Diprotodon remains are at Sorrento.

A recently fallen calcified dune boulder in Cape Liptrap Coastal Park has exposed the infills of four sets of footprints. While yet unidentified they appear to be of megafauna maybe 60,000 years old: one set appears to be of a large wombat-like creature.

The field outing was to the Koonwarra dig site. The major site was overgrown, but a smaller site on the north of the highway revealed numerous plant fragments of a number of species.

Graeme Rowe

SUBS FOR 2014-5 ARE NOW DUE

See inside back cover for details.

REPORT ON BUSINESS MEETING HELD 28,2,2014

General Meetings & Excursions

Friday 28 March: **AGM**. Wildlife Health Surveillance – Pam Whitely

Saturday 29 March: Aberfeldy after the Fires – Geoff Pike. Will invite Sale FNC. Meet Thomson Dam carpark at 9.30am.

Friday 25 April: Birds of Long Forest – Marilyn Hewish

Saturdy 26 April: Spotlight walk and moths in Morwell NP. Meet Kerry Rd carpark **6pm** for BBQ tea prior to activities at dusk.

Botany Group: Saturday 5 April: Olsens Bridge Reserve plant survey for the Friends of the Upper Morwell River. Contact: Wendy Savage **☎** 5634 2246.

Bird Group: Tuesday 1 April: Yinnar/Budgeree area. Meet 8.30am at Station park in the main street in Yinnar. Contact Alix Williams **☎** 5127 3393, alixw@spin.net.au.

Finance – Cash Mgt Trading A/c \$3654.38. Term Deposit \$13,909.18

Business Pending

Botany microscope – discussion deferred

SEANA camp with Sale FNC for Spring 2016 – Phil has contacted Mary Cooper, and suggests we meet with them April 4th.

Business Arising, Correspondence & General Business

Storage at Uniting Church is in place with locked cupboard and equipment stored in it. Alix has put some bird books in there, and will ask Marja about storing some books from the library. Keys held by Phil, David S, Alix and Wendy.

Thompson Reserve proposal – Alix still waiting on a response from Max so will contact him again.

Jean Galbraith program on Hindsight – David S has made CDs and will put one in library.

Application by AGL Loy Yang for mining licence in part of the Traralgon Flora & Fauna Reserve near Whitelaws Track – Julie Chapman alerted us to this, and sent us her letter of objection. Jackie will respond.

ANHM for 2013 was awarded to Marilyn Hewish. Our nomination of Ken Harris will remain current, and we are to submit achievements of the past year to add to dossier by May.

Dargo Summer Camp – due to the bushfires closing the road on Friday only 3 members got through and 17 had to wait until Saturday afternoon. Seven pulled out due to distance to travel (for only 1 ½ days' camp). Payment only required for the nights stayed by those who attended.

LVFNC website – new website has been set up with Web Hosts Australia at no cost to club as long as ad for host is on screen. Web address is LVfieldnats.org at cost of ~\$17.50/year. Redirection of our new site has been set up from State Library until May. John Sunderland has updated most aspects of the program and details.

Victorian Nature Photography Group will be at Munjara Camp Glenmaggie 3-5 October, and asked club for some local guidance. John Topp will lead some excursions and Ken Harris will give a presentation Friday evening. Details will be forthcoming and club members are welcome to join in.

Megan Hughes, Latrobe Catchment Landcare, has received funding for her project on Gippsland Redgum Grassy Woodland communities on private property and wants to set up discussions re our involvement. \$2500/yr for LVFNC to do bird and plant surveys. Ken H and Alix will meet her to discuss.

AGM planning – Positions vacant: Vice Presidents 2 & 3, Secretary and Publicity Officer.

Naturalist production – discussed issues re bimonthly production, colour printing and emailing to some members. Phil will draft a survey to gauge members' preferences.

Lichen Survey of Morwell NP has been completed and Ken Harris and Simone Louwhoff plan to produce a booklet. Club is prepared to assist with funding.

Walkie Talkies were used at Dargo Camp, and John Poppins has evaluated their effectiveness. They are suitable for our use, but he suggests we need to buy better rechargeable batteries which will last longer on an excursion.

Edward Hunter Reserve adjoining housing development – have had a response to our objection.

Club badges – Alix will investigate cost after request from Rohan Bugg.

Brochure for 2014 printed and available at GM.

Conservation Matters

Cores and Links – Hancocks have completed a one-off harvest of the Jack River block and College Creek and they will be handed over.

Koala audit team will be visiting the Strzeleckis and will conduct audit work for 10 days from March 18 and will invite people to observe.

Latrobe City have launched Natural Environment Sustainability Strategy for 2013/14 for comment by March 19. Phil and Jackie will look at it to make a comment.

GUEST SPEAKER FOR MARCH

Dr Pam Whiteley is from Wildlife Surveillance Victoria, Faculty of Veterinary Science, The University of Melbourne, Werribee. The unit investigates sick and dead wildlife to understand wildlife health. She encourages recruitment of specimens of mammals, birds, reptiles and amphibians from which she investigates likely causes of death such as bacteria and parasites.

GUEST SPEAKER FOR APRIL

Marilyn Hewish. In 1984, as a novice birdwatcher, Marilyn became interested in Long Forest, a small area of mallee woodland near Bacchus Marsh near Melbourne. This is the

only mallee south of the Divide, an 'island' remnant from thousands of years ago. From 1984 to 2005, Marilyn compiled a bird list of 174 species, including some, like the Crested Bellbird, typical of dry country in Victoria's north-west. Historical research showed that bird-watchers had written about the area since the 1880s. This talk describes the fascinating discoveries from this project and shows how even a small patch of bush can repay intensive study of its birds.

FOR THE DIARY

NOTE – Daylight Saving ends at 2am Sunday 6 April

SEANA Camp at Marysville 2-5 May. Hosted by the Upper Goulburn FNC. Enquiries: grahamvpage@gmail.com or **☎** 5774 7555.

SUBSCRIPTIONS FOR 2014-5 ARE NOW DUE. Please see inside back cover for details. Fees are unchanged from last year.

From the Club summer camp at Dargo, January 17-20:

LANKEY PLAIN

Sunday morning

After a rather nerve racking 2 hour drive – due to low cloud with visibility down to less than 10 metres and a road which threw up huge clouds of dust – we arrived at Lankey Plain in bright sunshine. The Plain is surrounded by Snow Gums regenerating after the 2003 fire. Some trees had resprouted while new young trees have reached a height of about 1.5 metres, a reflection of the slow growth in the cold and short summer of the high country.

There was a distinct 'line' where the fire had crossed the Plain, separating the burnt and unburnt areas. The unburnt part had few plant species other than the harsh tussock grass. This wiry grass, I believe, contains aluminium which protects the grass from the ultraviolet light and makes the grass unpalatable to grazing cattle which prefer the soft herbs such as Yam Daisy and Alpine Celery (see Note 1). The burnt area by

contrast contained Alpine or Orange Everlasting (Xerochrysum acuminatum -2), Billy Buttons (Craspedia coolaminica, and C. jamesii), Native Caraway (Oreomyris eriopoda), Brachyscome spp., Bogong Daisy (Olearia frostii), Alpine Shaggy Pea (Podolobium alpestre) and Yam Daisy (Microseris lanceolata) among others. The road gutter and a dry creek bed show what a bit of water They contained (Polystichum species), a rush (Juncus sp) with Epacris microphylla, Alpine Baeckea (B. gunniana), Tree Violet (Hymenanthera dentata – Note 3) and a Leek Orchid (*Prasophyllum* sp).

On higher ground along the roadside overlooking the Plain and on the edge of the Snow Gums, were large stands of Pale Vanilla Lilies (Arthropodium milliflorum), Diggers Speedwell (Derwentia perfoliata) and the cream flowered Alpine Bottlebrush (Callistemon pityoides - Note 4). One of the cushion bushes, Scleranthus biflorus was also present. It has two tiny green flowers on stalks held above the leaves. another Scleranthus species, S singuliflorus which looks very similar and has, unsurprisingly, one flower per stalk. Also found were three species of Aceana -Bidgee widgee (A. novae-zelandiae), Hybrid Burr (A. anserovina) and Sheep's Burr (A. ovina) (Note 5.)

Oh, and the return journey was clear and enjoyable except for the Savages who limped home after a wall puncture on the flimsy spare wheel carmakers think are suitable for Australian gravel roads.

Notes.

- 1. Alpine Celery suffered severely from cattle grazing in the Kosciousko National Park. Cattle were removed in the 1970's. Alpine Celery is still recovering.
- 2. Alpine Everlasting, now *Xerochrysum* acuminatum was previously named Bracteantha subundulatum (1992), Bracteatha acuminata (1991), Helichrysum acuminata (1838) and Gnaphalium subundulata (1845). How do we keep up?! Helichrysum is an African group of plants, long separated from Australia but we still keep it for some species.

- 3. Tree Violet. According to Frazer and McJannett (see below) and the Flora of Victoria Vol. 3, Hymenanthera may be included in the genus Melicytis.
- 4. According to the Flora Vol 3, *Callistemon pityoides* was named *C. sieberi* in Willis Vol. 2. *Callistemon sieberi* is now a different species which Willis called *C paludosus*. Got it? I'm not sure I have!
- 5. The hybrid *Aceana* X *anserovina* is a cross between *A. anserinifolia* and *A. ovina*. *Aceana anserinifolia* is the female parent and will also cross with two other *Aceana* species, *A. agnipila* and *A. echinata* which have flowers down the stem whereas Bidgee-widgee has flowers (and the sockclinging seeds!) in a ball at the top of the stem. (Flora Vol. 3)

References

Flora of Victoria, Vols 2, 3 and 4.

Fraser, I. and McJannett M., Wildflowers of the Snow Country – A Field Guide to the Australian Alps. Vertego Press, Canberra. 1998

Jackie Tims

EXCURSION TO ROYAL BOTANIC GARDENS CRANBOURNE

Twenty members and friends enjoyed a busbased excursion to the Royal Botanic Gardens Cranbourne on Sunday 24th November, in cool to mild conditions with only occasional brief showers. Wendy's brother John Parker kindly drove the hired Yinnar Community Bus – he and his wife Jill were happy to visit these gardens for the first time.

Most of us divided our time between the formal Australian Garden and the extensive remnant native bushland to its south-east. The Australian Garden displays more than 1700 plant species in settings designed to convey the essence of Australian landscapes in a contemporary or symbolic fashion. Thus, for example, the famous Red-sand Garden is bisected by a long linear planting strip representing the crossings of our continent by the early European explorers.

Much new development at the northern end of the Australian Garden has been opened to

the public only in the last year or so. I particularly enjoyed the extensive plantings on Howson Hill, which offers spectacular views over the garden's watercourses. The nearby Arbour Garden displays an amazing diversity of *Kennedia* species that I was not aware of – many are to be found in WA. At the northern extremity, an interesting experiment in the new Greening Cities Garden displayed espaliered young Snow Gums of a NSW variety.

It was a good day for enjoying the gardens' birdlife. Whilst wandering in the Gondwana Garden, Julie Parker heard a Dusky Woodswallow and we then enjoyed watching it on its nest, and others nearby.

A later ramble on the Trig Track which joins the Visitor Centre and Stringybark Picnic Area offered such birds as the Eastern Yellow Robin, Common Bronzewing, Superb Fairy-wren and Spotted Pardalote. The Trig Point Lookout, on the highest point in the area, gives good views over the Australian Garden itself and towards both Port Phillip Bay and Westernport Bay.

I almost forgot to mention the delightful pair of Ringtail Possums cuddled up together in a gap between external timber slats and a glass window above the café in the Visitor Centre.

All in all, a very pleasant final excursion for 2013

Philip Rayment



Australian Garden from Trig Point Lookout



Red Sand Garden