

WARM AIR 21 August 2021

Aviation Sports Club Gliding Newsletter

THIS WEEKEND:

No Flying this Week

www.ascgliding.org

Bank Acct 38-9014-0625483-000

Saturday

Instructing:

Towing:

Duty Pilot

Sunday

Instructing:

Towing:

Duty Pilot



MEMBERS NEWS

Well last weekend there was a number of training flights and a X-country exercise.

In Warm Air this Week;

- *Weekend Reports*
- *Club News*
- *Weekend Photo Extras*
- *Part 8: Avian evolution. Jonathan Pote*
- *Roster*

Weekend Reports

Saturday Instructor Lionel Page Reports

Saturday morning was interesting, and I was very fortunate to have Ivor open up for me as I was the Run Director at Parkrun in Browns Bay. It is a free, timed 5km family friendly, international run held every Saturday morning at a lot of parks around NZ and the world.

When I arrived at the field, Ivor had everything organised, however the weather was not looking very good.

As I had not flown in a while - I did a quick circuit to get back into it. Next up was Krishna, also a circuit. Will was next, the conditions were certainly challenging with lots of turbulence.

Debrah, who had the longest flight of the day, managed to practise some turns together with some thermalling. We even got to fly in a bit of light rain as the lift was in the front of the showers.

The day then started to deteriorate. Shiv and Logan both got a fairly short flight in before Alex did a quick circuit to test the trying conditions.

We packed away just ahead of a heavy downpour - after which the clouds parted and the blue skies returned - however by then we'd given it away and departed for a cool beverage and a long chat in the club rooms.



Once that was completed we soon had the fleet out and inspected. We would be flying from 26, so things were set up there and again we waited while low cloud and a few showers passed by on both sides of the field. By now we had two keen trial flighters with us who were keen to use the time to find out all they could about our sport, as well as the twin we would be flying in.

Once we could see blue sky returning, we launched the first of the trial flights with Will Snell keen to take his first ever flight in a glider. It was just after midday, and we had a reasonable cross wind. The climb to 2500 was smoother than expected and we released below the clouds to the west of the field. As we flew around the clouds were visibly thinning out, although we didn't really find any usable lift. Will had several interesting questions about glider flying, and clearly enjoyed his time on the controls feeling how things worked. However all too soon we were back in the circuit and I took over for the landing.

Next up was Kieran , another who was excited about taking his first flight in a glider. By now the sun was reaching the ground in places, and we could feel patchy lift during the launch. Once off tow we found a light thermal and I was able to demonstrate the various aspects of control to Kieran, as well as a couple of simple stalls which he was interested to experience, all without dropping below our release height. With rain showers passing through north and south of us making for some interesting discussion, Kieran took over the controls and flew out into wind for a while before trying out some turns and then heading back into the circuit. We had been up for almost 30 mins and he was excited by the whole experience. Once back on the ground both Will and Kieran stayed around for a while discussing what they had done and asking more questions. They left saying they were both keen to do more gliding and were likely to be back soon to join up and go flying. While this was happening both Tony and Alex launched in GBU and GVF respectively, hoping to make the most of the patchy lift while staying well upwind of the field. Both did indeed manage to catch some lift and both got flights of around 45 mins before returning to the field. After a short break the last flight of the day was for Matt in GMP. He was to discover that by now the lift was vanishing, and while he did find some, all too soon he was returning to land.

Noone else was flying so we packed everything away and headed to the club room for a hearty debrief session before locking up and heading home. Just 5 flights for the day although everyone agreed it had been an enjoyable day's flying.

Club News

COVID 19 : Obviously we are in Lockdown for the next 7 days or so..... So, no flying for a little while. Keep monitoring the Locations of Interest and follow the Lockdown rules. We know we can beat this, and we know the privileges we have had in between lockdowns. Look after each other and keep in touch.

Golden rules for Alert Level 4

-  **Stay at home** in your bubble
-  **Feeling unwell?** Call your doctor or Healthline on **0800 358 5453** about getting tested
- If leaving the house:**
 -  **Wear a mask** and keep a **2m distance** from others
 -  Keep on **scanning QR codes**
 -  **Wash and sanitise hands** often
 -  **Stay local** and be **kind** to one another

Te Kāwanatanga o Aotearoa
New Zealand Government

**Unite
against
COVID-19**

I would imagine the ASC Condor Simulator Gliding group will be gathering for some cool online soaring. I understand there is now accurate Northland Scenery available to flyover. I am sure if you talk to Craig, Ray or Andrew F they will help set you up. The “Q” revive key is known to be a popular reset for some. [Condor Soaring - The Complete Soaring Simulator](#)



And send us pictures and brief comments on any of your aviation related Lockdown activities that are keeping you occupied e.g. flight sim, model-making, books etc. We will note in next weeks Warm Air.

Cockatoo sightings or any bird strikes

Avian Musings: This week starts with a tangent, to introduce Lizzie Civil and request information about Cockatoo sightings or any bird strikes.

To Quote from the RNZAF Base Auckland newsletter, “Our new Base Auckland Airfield Manager, Lizzie Civil was welcomed by CO Operations Squadron (Auckland), SQNLDR Matt Nanda. Lizzie brings a wealth of knowledge and industry experience to Whenuapai Airfield. Lizzie was previously our Airfield Environmental Officer and is currently the Chair of the New Zealand Wildlife Hazard Group. Prior to this she contracted her expertise as an ecological consultant on wildlife management to other airports in New Zealand. Her other roles have included: Grounds/Wildlife Manager and Wildlife Ranger at Auckland International Airport. Lizzie has a Bachelor of Science majoring in Biodiversity Management.

Lizzie will be over to fly with us sometime and meanwhile requests “If anyone from the Glider Club ever does hit a bird please do let me know. Also keep in mind that all NZ Airports require a DOC certification that stipulates we must double bag, label (time, date, location, occurrence) and freeze any birds that are found/hit on Airport that are on the ‘Notifiable Species List’. Birds on this list are any birds that are Nationally Endangered, Vulnerable or Recovering, so it’s great to have you on board to know what those species are.



You may be interested to know we have now added Sulphur-Crested Cockatoos to our Risk Matrix now that they are in close proximity to our 08/26 Runway”.



The Sulphur Crested Cockatoo, introduced from Australia and now established in Aotearoa, is unlikely to go un-noticed: Please report any sightings to me (JP) or a committee member. Likewise report any aircraft/bird-strike or dead bird seen on the airfield.

Weekend Photo Extras



What's Rex taking a picture of??? Answer "Lake Whenuapai" and a bunch of Admirers



Shall we fly or shall we talk - Lets Fly - Action Stations



Our Wing runner Bat has a new brand spanking paint job. A bright orange similar to Mitre 10 and Dash's rain jacket, which was blue prior to painting

Part 8: Avian evolution. Jonathan Pote

This week, I am afraid to say, contains the 'hard yards'. It covers the 'why, and how' what evolved into ourselves split from those animals that evolved into birds. We both have a common ancestor, albeit well over a hundred million years ago.

Evolution is an unbelievably complex subject, some biological variations becoming very successful, others not so, the latter eventually dying out. Evolution of one life form of course affects all others in its shared ecosystem, leading to the extinction of other species "through no fault of their own". To this extraordinarily complex web, time adds a vital fourth dimension. We humans have endeavoured to draw a two-dimensional map of the 'Evolutionary Tree'; not only do four dimensions not fit into two, but we only have a few pixels of information, and these are easily put in the wrong place. New discoveries and revised thoughts are happening all the time, and it pays to be a little out of date in order to be on firmer ground.

To compile the most basic diagram, life is divided into five 'Kingdoms', three of which we know well: plantae (which synthesise their own nutrition using solar energy), fungi (that digest and absorb energy sources around them) and animalia (that rely on ingesting ready formed energy sources). Thus both the simple single cell amoeba of school biology days and ourselves are in the Kingdom 'Animalia'. So are birds.

We can ignore two kingdoms, the Prokaryotes (single celled bacteria and blue-green algae without a nuclear membrane) and Protists (single cell with a nucleus).

Just to muddy the waters, life in the Kingdoms and further sub-divided into Phyla, Class, Order (sub-order, infra-order), family (sub-family), genus and species, the latter often subdivided. As you see, the graphic evolutionary tree has become so complicated that scientists are stretched to find suitable new words, raiding ancient Latin at times. However, many million years ago (MYA is a useful abbreviation) what became birds and what became ourselves were only a minute genetic variation apart, not yet even separated enough to be two species. Clearly a lot of evolution has happened since then.

We stay with the birds down to the Phylum Chordata (effectively animals with a backbone, although some only have a notochord) but part from them when life is sub-divided into Classes (the third division of classification). Birds are in the Class *Aves*, ourselves in the Class *Mammalia*. Carl Linnaeus (1707 – 1778) drew the basic tree of evolution using Latin or *scientific* names for each species two-hundred and fifty years ago, an extraordinary achievement. Alexander Humboldt (1769 – 1859) was the first to understand ecosystems (*'Kosmos' five volumes 1845 - 1869*) as effectively living organisms in themselves and Charles Darwin (1809 – 1882) completed the basic understanding of how life on Earth came to be (*On the Origin of Species by Natural Selection' 1859*). All three travelled widely developing their ideas and rarely can so few have achieved so much. Interestingly, as space exploration seeks to find 'Life' on other planets, the fundamental definition of what constitutes 'Life' is "Capable of Darwinian Evolution". Do you remember the line "It is life, Scottie, but not as we know it". A very prescient line of script.

To quote Wikipedia,

Bird

Birds are a group of [warm-blooded vertebrates](#) constituting the [class Aves](#) /ˈeɪviːz/, characterised by [feathers](#), toothless beaked jaws, the [laying](#) of [hard-shelled](#) eggs, a high [metabolic](#) rate, a four-chambered [heart](#), and a strong yet lightweight [skeleton](#). Birds live worldwide and range in size from the 5.5 cm (2.2 in) [bee hummingbird](#) to the 2.8 m (9 ft 2 in) [ostrich](#). There are about ten thousand living species, more than half of which are [passerine](#), or "perching" birds. Birds have [wings](#) whose development varies according to species; the only known groups without wings are the extinct [moa](#) and [elephant birds](#). Wings, which evolved from [forelimbs](#), gave birds the ability to fly, although further evolution has led to the loss of flight in some birds, including [ratites](#), [penguins](#), and diverse [endemic](#) island species. The digestive and respiratory systems of birds are also uniquely adapted for flight. Some bird species of aquatic environments, particularly [seabirds](#) and some [waterbirds](#), have further evolved for swimming.

Birds are [feathered theropod dinosaurs](#) and constitute the [only living dinosaurs](#). Likewise, birds are considered [reptiles](#) in the modern [cladistic](#) sense of the term, and their closest living relatives are the [crocodilians](#). Birds are descendants of the primitive [avialans](#) (whose members include [Archaeopteryx](#)) which first appeared about 160 million years ago (MYA) in China. According to DNA evidence, modern birds (**Neornithes**) evolved in the [Middle](#) to [Late Cretaceous](#), and diversified dramatically around the time of the [Cretaceous–Paleogene extinction event](#) (66 MYA) which killed off the [pterosaurs](#) and all non-avian dinosaurs. *NB Our Tuatara is classed as a reptile, separated from the dinosaurs although present alongside them until 66 MYA and the great extinction even. The study of evolution is still evolving fast!*

Many [social species](#) pass on knowledge across generations, which is considered [a form of culture](#). Birds are social, communicating with visual signals, calls, and [songs](#), and participating in such behaviours as [cooperative breeding](#) and hunting, [flocking](#), and [mobbing](#) of predators. The vast majority of bird species are socially (but not necessarily

sexually) [monogamous](#), usually for one breeding season at a time, sometimes for years, but rarely for life. Other species have breeding systems that are [polygynous](#) (one male with many females) or, rarely, [polyandrous](#) (one female with many males). Birds produce offspring by laying eggs which are fertilised through [sexual reproduction](#). They are usually laid in a nest and [incubated](#) by the parents. Most birds have an extended period of parental care after hatching.

Primate

A **primate** ([/ˈpraɪmət/](#) (listen) [PRY-mayt](#)) (from Latin *primat-*, from *primus* 'prime, first rank') is a [eutherian mammal](#) constituting the [taxonomic order Primates](#) ([/praɪˈmɜːtɪz/](#)). Primates arose 85–55 million years ago first from small [terrestrial](#) mammals, which adapted to living in the trees of [tropical forests](#): many primate characteristics represent adaptations to life in this challenging environment, including large brains, [visual acuity](#), [color vision](#), a [shoulder girdle](#) allowing a large degree of movement in the shoulder joint, and dextrous hands. Primates range in size from [Madame Berthe's mouse lemur](#), which weighs 30 g (1 oz), to the [eastern gorilla](#), weighing over 200 kg (440 lb). There are 190–448 [species](#) of living primates, depending on which classification is used. New primate species continue to be discovered: over 25 species were described in the 2000s, and 11 since 2010.

You all knew that anyway, but I thought I would just remind you. To recap, quite apart from (mostly) being able to fly, in Avians: ***The digestive and respiratory systems are uniquely adapted for flight.***

Birds (Avians) are descendants of the primitive [avialans](#) (whose members include [Archaeopteryx](#)) and their closest living relatives are the [crocodilians](#). Avians have also evolved their airframe further: Unwanted heavy components have disappeared – gone is the heavy tail of [Archaeopteryx](#), gone are jaws with teeth, replaced by a simple lightweight bill for feeding.

A look at [Archaeopteryx](#). It is easy to think of [Archaeopteryx](#) as we do of modern birds – lots of examples with clearly defined features in common flying around, just like our Spur-wing Plover. In fact Archy was initially described from A SINGLE FEATHER found in 1861 in what is now Germany. Luckily a more or less complete fossil was found before the year was out, or who knows what wrong conclusions might have been drawn from that feather. Darwin was alive then, of course, and delighted to include this 'missing link' in later versions of *The Origin of species*. Only another ten fossil specimens have so far come to light.



The single feather

A near-perfect fossil of [Archaeopteryx](#).



An informed artist's impression of [Archaeopteryx](#)



ROSTER

Month	Date	Duty Pilot	Instructor	Tow Pilot
Jul	3	G LEYLAND	I WOODFIELD	P THORPE
	4	I O'KEEFE	A FLETCHER	R CARSWELL
	10	M MORAN	S WALLACE	F MCKENZIE
	11	T O'ROURKE	R BURNS	D BELCHER
	17	R BAGCHI	A FLETCHER	R HEYNIKE
	18	T PRENTICE	L PAGE	G CABRE
	24	C BEST	P THORPE	R CARSWELL
	25	E LEAL SCHWENKE	I WOODFIELD	D BELCHER
	31	R MCMILLAN	S WALLACE	P THORPE
Aug	1	A MICHAEL	R BURNS	P EICHLER
	7	R WHITBY	A FLETCHER	R HEYNIKE
	8	C DICKSON	P THORPE	G CABRE
	14	K JASICA	L PAGE	F MCKENZIE
	15	J DICKSON	I WOODFIELD	R CARSWELL
	21	S HAY	S WALLACE	D BELCHER
	22	K BHASHYAM	R BURNS	P EICHLER
	28	K PILLAI	A FLETCHER	R HEYNIKE
	29	G LEYLAND	P THORPE	G CABRE
Sep	4	I O'KEEFE	L PAGE	P THORPE
	5	M MORAN	I WOODFIELD	F MCKENZIE
	11	T O'ROURKE	S WALLACE	R CARSWELL
	12	R BAGCHI	R BURNS	D BELCHER

	18	T PRENTICE	A FLETCHER	P EICHLER
	19	C BEST	P THORPE	R HEYNIKE
	25	E LEAL SCHWENKE	L PAGE	G CABRE
	26	R MCMILLAN	S WALLACE	F MCKENZIE