

Junior Field Naturalists SA

Newsletter - September 2021

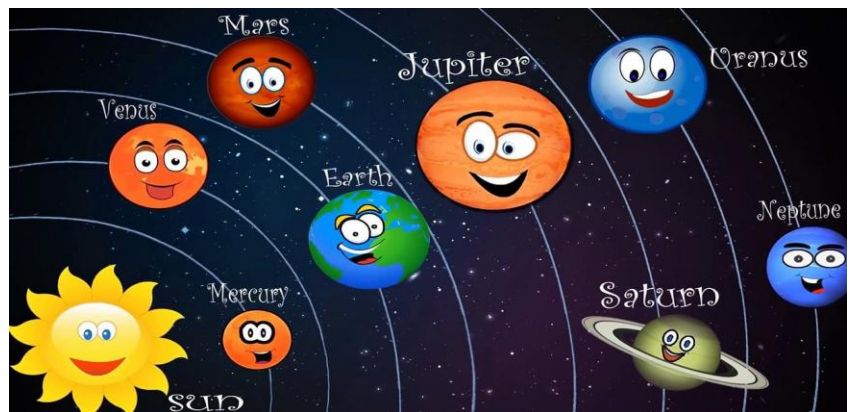
Hi Junior Field Naturalists,

September Meeting

When: Tuesday 21 September, 7.00pm, Bellevue Heights Primary School Gym

Topic: THE PLANETS

Abstract: Our solar system is made up of 8 major planets; a number of dwarf planets; and countless other rocky objects such as asteroids. We will take a pictorial tour of our solar system. How large is our Sun, and is it a typical star? Which is the largest planet in our solar system, and which is the smallest? What are the planets composed of and how do they compare to each other? We will explore the robotic exploration of planets and learn more about what they have revealed. Will humans ever establish colonies on any of these worlds, and what is the future for human planetary exploration?

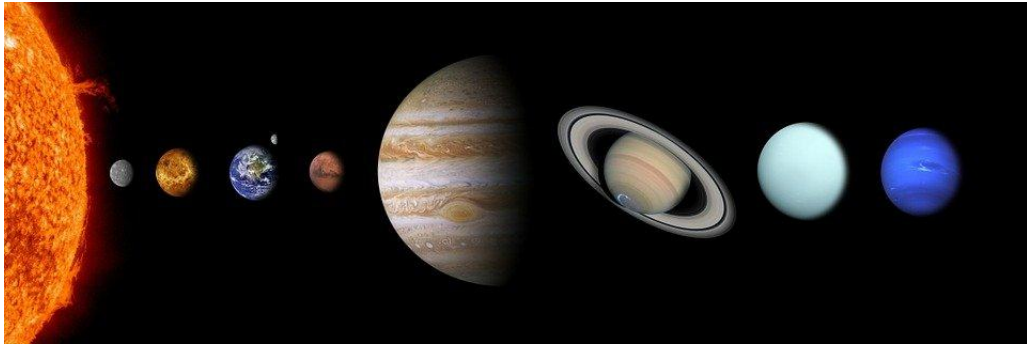


Speaker: **Paul Curnow** [B.ED] has been an astronomy lecturer at the **Adelaide Planetarium** since 1992. In 2002, he served as a southern sky specialist for visiting U.S. and British astronomers who were in Australia for the total solar eclipse. After nearly three decades of research, he is regarded as one of the world's leading authorities on Australian Aboriginal night sky knowledge; and in 2004, he worked in conjunction with the Lake Erie Nature and



Science Centre Planetarium in Ohio, on the creation of a show that features Indigenous Australian stories of the night sky. Moreover, from 2018-2021, he has served as a consultant on Indigenous Astronomy for the Australian Space Agency. In addition, Paul runs several popular courses for the public that focus on the constellations, planetary astronomy, historical astronomy and ethnoastronomy,

which primarily deals with how the night sky is seen by non-western cultures. He appeared as the keynote speaker at the inaugural 2010 Lake Tyrrell Star Party in Sea Lake, Victoria, and in 2011 was a special guest speaker at the Carter Observatory in Wellington, New Zealand. Since 2012 Paul has taken the role of Lecturer for the 'Astronomy & the Universe' course (EDUC2066); and between 2019-2021 for 'Science' (EDUC 2030) for the School of Education at the University of South Australia. Moreover, since 2021 he has been a member of the Andy Thomas Space Foundation Education Advisory Committee. Paul appears regularly in the media and has authored over 50 articles on astronomy.



Program of Talks and Activities

Below is our current schedule of dates for 2021. Monthly meetings are held at 7pm in the **Bellevue Heights Primary School Gym**.

Have a particular topic or field trip you would like us to include? Let us know and we'll see what we can do to make it happen.

21 September - Paul "Starman" Curnow: **THE PLANETS**

19 October - Professor Flint: **ADVENTURES OF A PALAEOONTOLOGIST**

Note change of date for our October meeting which was originally a week later.

30 November - **DAVID CHRISTOPHEL MEMORIAL QUIZ NIGHT**

Parents attend meetings and field trips with their children and are responsible for their supervision.



Our Club's Donation to BioR



Ornithologist **Dr David Paton** of **BioR** led our recent bird banding field trip at Monarto. The cornerstone of BioR's work involves reconstructing self-sustaining habitats to best support our declining wildlife. As a small token of appreciation, our club has donated \$100 to BioR. This is enough to raise 50 sheoak seedlings to grow a lasting food source for the endangered KI Glossy Black Cockatoos affected in the 2019-20 bushfires.

Upcoming events that might be of interest:

Bickford's Lanterns & Bedside Lightstations

When: Wednesday 6 October

Time: Choice of 2 sessions: 11am - noon & 1pm - 2pm

Where: Shed 13, located next to the Clipper Ship *City of Adelaide*, Dock 2, Honey St, Port Adelaide

Check out the City of Adelaide web site for a map of the ship's location - <https://www.cityofadelaide.org.au/>



Tickets: \$15 per child. Event is aimed at 5-12 year olds who will construct their choice of either a lantern or lightstation.

Bookings: Book through Eventbrite -

<https://www.eventbrite.com.au/e/october-school-holiday-event-lanterns-and-lightstations-tickets-169566940283?ref=eios>

Bickford's Lantern:

Based on the traditional brass clipper ship lanterns of old. Construct the lantern from a plastic Bickford's bottle, paper and cardboard. Insert a flickering orange/yellow light-emitting-diode (LED) and your lantern will glimmer like a burning candle.

Bedside Lightstation:

Build a lighthouse from coloured paper, add a transparent 'lamp room' with an aluminium foil reflector, then install a white light-emitting diode (LED). Surround the lighthouse with seaweed, shells and driftwood to create a lightstation. Makes a perfect beacon to guide you to bed at night!



Birds in the City

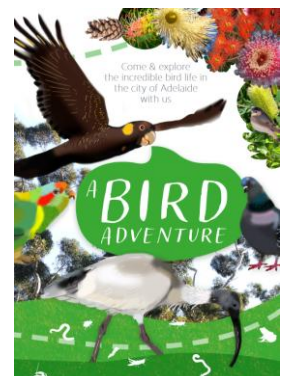


Birds in the City explores the biodiversity in our city and creates awareness through interactive bird-themed activities, augmented reality experiences and learning tools for kids. Discover what birds live in the Park Lands, meet the artist behind the Rundle Mall pigeon and go on a self-guided learning adventure to connect with nature and find out why the birds we share the city with are so important.

When: 25 September to 4 October 2021

More Info: cityofadelaide.com.au/birds-in-the-city

From the web site you can download a FREE copy of "**A Bird Adventure**" and learn about the wonderful birds that live in the city.



Nature Festival



Now in its second year, this is a new festival for South Australia. With over **200 events for all ages**, the **Nature Festival** is full of creative ways to connect with nature and each other.

The festival includes a huge range of nature-based activities such as nest box workshops, nature walks, bird watching, crafting with nature, beachcombing, wetland tours, geocaching, dolphin sanctuary tours, nature scavenger hunts, orienteering and so much more.

When: 25 Sept - 4 Oct

More Info: <https://www.naturefestival.org.au/>



Two Nature Festival events from Nature Play SA:

Into the wild: a walk where bandicoots dig and blue wrens sing



Explore the unique world of nature. We'll discover tracks and traces of marsupials such as endangered Southern Brown Bandicoots; learn bird calls; observe native orchids; and hear fascinating stories from some unique flora and fauna found in **Scott Creek Conservation Park**.

Session times: 9.00am – 10.00am and 10.30am – 11.30am

This walk is recommended for ages 6+.

More Info and Bookings: <https://natureplaysa.org.au/event/into-the-wild-a-walk-where-bandicoots-dig-and-blue-wrens-sing/>

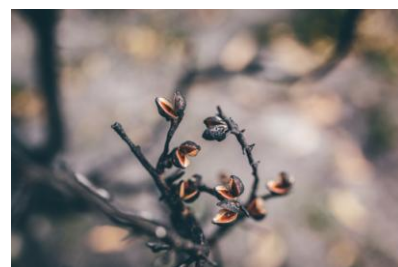
From the ashes: a walk to explore fire recovery in Scott Creek Conservation Park

Tour post-fire grounds where you will explore concepts of: fire ecology; colonising species; changes in habitat composition; and what the future looks like for the biodiversity of Scott Creek Conservation Park.

Session times: 12.00 to 1.15pm; 1.45pm to 3.00pm and 3.30pm to 4.45pm

More Info and Bookings:

<https://natureplaysa.org.au/event/from-the-ashes-a-walk-in-to-explore-fire-recovery-in-scott-creek-conservation-park/>



MARINE DISCOVERY CENTRE SCHOOL HOLIDAY PROGRAM



seeded by
**GREEN
ADELAIDE**

Tickets \$10 - BOOK AT: <https://www.eventbrite.com.au/e/167552988499>

Your opportunity to become a Marine Science trainee

Thursday 7 October 12pm - 2pm



**Marine
Discovery
Centre**

Corner of Seaview Road and
Marlborough Street, Henley Beach

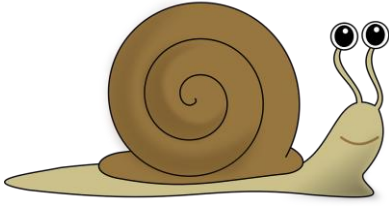
T: (08) 8115 7402

E: info@marinediscoverycentre.com.au

Includes
Beach Marine
Trail on
Henley Beach



Facts about SNAILS



- **Snail** is a common name for *gastropod molluscs* that can be split into three groups: land snails, sea snails and freshwater snails.
 - Snails can have **lungs** or **gills** depending on the species and their habitat. Some marine snails can have lungs and some land based snails can have gills.
- Snail-like animals that do not have a shell are usually called **slugs**.
 - Most snail species have a ribbon-like tongue called a **radula** that contains thousands of microscopic teeth. The radula works like a file, ripping food up into tiny pieces.
 - The majority of snails are **herbivores**, eating vegetation such as leaves, stems and flowers. Some larger species and marine-based species can be predatory omnivores or even carnivores.
 - The giant **African land snail** grows to about 38 cm and weighs 1 kg.
 - The largest living sea snail species is the **Syrinx aruanus** whose shell can reach 90 cm in length and the snail can weigh up to 18 kg!
 - Common **garden snails** have a top speed of 45m per hour, making the snail one of the slowest creatures on Earth.
 - As they move along, snails leave behind a trail of **mucus** which acts as a lubricant to reduce surface friction. This also allows the snail to move along upside down.
 - Depending on the species, snails can live 5 - 25 years.
 - The common garden snail is regarded as an agricultural and garden pest as it eats the leaves and stems of crops.
 - The snail is a delicacy in French cuisine called **escargot**. The snail is also eaten in many other countries of the world, often as a fried meal.
 - In English, the expression "**a snail's pace**" is a term used to describe a slow, inefficient process, and "snail mail" is now commonly used when referring to sending regular mail rather than that sent by email.



From sciencekids.co.nz

Just for Fun



Why was the math book sad?

Because it had too many problems.

What is a scientist's favourite dog?

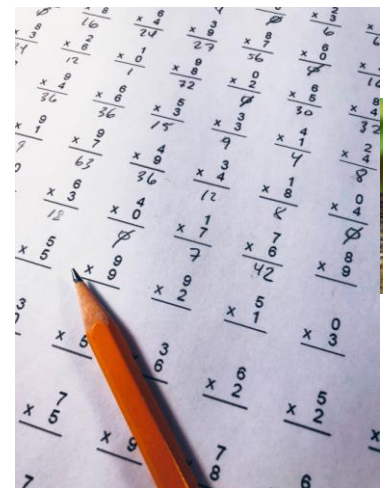
A lab (labrador).

Why does a seagull fly over the sea?

If it flew over the bay it would be a baygull.

What do you find in the centre of Gravity?

The letter "V".



Have fun with science ...

DENSITY SPOOKY COLUMN



You'll need

Vegetable or sunflower oil
Water
Food colouring
Treacle
Golden syrup/corn syrup
LEGO or other small objects.



Instructions

Carefully pour the liquids into the glass one by one.

Start with the most dense and end with the least dense.



The order in our density column is treacle, golden syrup, red water and oil.

Can you find a spooky object to float on each layer?

Why does it work?

Each of the liquids have a different mass of molecules or different numbers of parts squashed into the same volume of liquid. This means they have different densities meaning one can sit on top of the other - the more dense a liquid is the heavier it is.

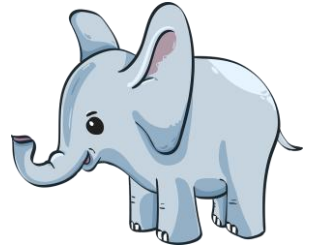
Extension Task

Try other liquids, can you predict the order of density by pouring them into a container first?

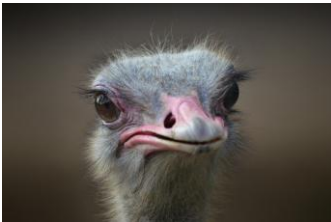
Science Sparks™
Adult supervision required. You are responsible for your own safety.
www.sciencesparks.com



Did you know ... ?



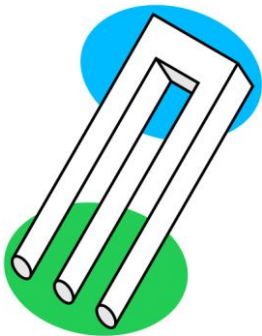
- ❖ An **adult elephant** needs to drink more than 200 litres of water each day.
- ❖ How far do you think a **lion's roar** can be heard? It can be heard for a whopping 8 kilometres.
- ❖ **Lions** have been observed to rest for a major part of the day, usually around 20 hours.
- ❖ The **Blue Whale**, the largest animal in the world, needs to come to the surface of the water to breathe.
- ❖ **Owls** can rotate their heads up to 270 degrees without moving their body! Humans can only rotate their heads about 80 degrees.
- ❖ The **hummingbird** flaps its wings extremely fast, making between 80 to 200 flaps per second to be able to hover.
- ❖ Your **mouth** produces about 1 litre of saliva per day.



- ❖ You won't be able to taste food if it weren't for **saliva**, because our taste buds can only detect the taste of food once it's dissolved in a liquid.

- ❖ The **ostrich** is the fastest running bird in the world, having a running speed of 70 km per hour.

From: <https://flintobox.com/>



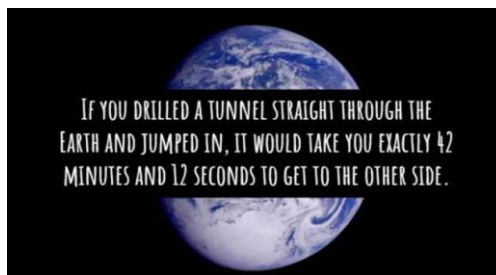
The Impossible Fork

The **impossible fork** is exactly that: *impossible!*

When looked at from the bottom, it appears to have three prongs, but at the top it clearly is only split in two.



A UK company has developed an ice-cream containing jellyfish proteins. It **GLOWS** when you lick it.



IF YOU DRILLED A TUNNEL STRAIGHT THROUGH THE EARTH AND JUMPED IN, IT WOULD TAKE YOU EXACTLY 42 MINUTES AND 12 SECONDS TO GET TO THE OTHER SIDE.



A small child could swim through the veins of a blue whale's heart.

CK-12.org

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