



## PERTSHIRE SOCIETY OF NATURAL SCIENCE

Scottish Charity Number SCO 12718

### SUMMER NEWSLETTER 2016

Dear PSNS Members,

#### **A message from the President**

A lot has happened since John asked me to take over the president role back in March of this year. Almost immediately, we learned that the Museum was to become part of the new Culture Perth and Kinross trust and, with that, came a very substantial increase in our rental costs. Rather than double our membership fee, we decided to be creative. As a result of a very productive series of meetings with CPK management, we are going to transform the traditional Friday PSNS meetings into a public lecture series called "Curious Minds". The lectures will feature expert speakers and will be around the theme of "Contemporary Science in Scotland".

We have already booked 12 excellent speakers for the coming season with talks ranging from local conservation through medical research to the absolute frontiers of physics. But don't be intimidated – our speakers have been asked to talk about their work in everyday language without recourse to jargon or impenetrable formulae.

But, there's no such thing as a free lunch. PSNS needs to pay its bills. There will be an admission charge of £6.00 for the general public and £3.00 for PSNS members, students and school pupils.

This initiative is absolutely essential for the future of PSNS. If PSNS members support it, the lecture series will be a success and we can look forward to celebrating our 150<sup>th</sup> anniversary in 2017. If PSNS members do not support it, then it is hard to see how the Society can continue in its present form. So, I am making a personal appeal to you – please come along on Friday evenings. Maybe even bring your kids or grandkids? It will be fun, interesting, challenging and much better than watching TV!

Tom Ryan PhD

#### **And a message from the Secretary**

On 1 April 2016, Culture Perth and Kinross(CPK), took over the running of Perth & Kinross Council's museums, galleries and libraries. As you know, PSNS gave its museum collections to Perth Council in the early years of last century and, since then, we have enjoyed good working relations with the bodies responsible for running the museum.

As of 1 April, the new culture trust, which has to generate income, increased rental charges for the accommodation we use at the museum and the Soutar theatre, presenting PSNS with a stark financial problem. Various options presented themselves:

- increase our subscription, possibly by as much as 100% and, inevitably, lose members
- do nothing and allow the society to fold
- do something new and imaginative.

Of course, we went down the ‘do something different’ route. PSNS, in association with CPK, will curate and present a series of public lectures on Friday evenings which will supersede the Parent Body lectures of old. CPK will handle the promotion, advertising and ticketing of the lectures.

**Curious Minds.** We have been delighted to discover how much cutting edge, world-leading research is going on in Scottish universities and research institutes and are very pleased that we will be able to bring internationally known and respected researchers to Perth to speak about their ground-breaking work. Topics covered will include: dinosaurs on Skye, a new drug to treat malaria, the discovery, in 2016, of gravitational waves, climate change, Peruvian coca and much more.

This initiative is a leap of faith for the society, taking it back to its founding principle – the encouragement of scientific research in Scotland. In order to succeed, the society must have the support of its members. The society needs an audience for these talks. The future of the society hangs in the balance.

The society also needs new blood and would like to see young people attending its lectures. We hope these talks will inspire young people to study science. The lectures will be suitable for school pupils over the age of 15. If you have grandchildren or great grandchildren in this age group, bring them along to Curious Minds.

The lectures will be held in the **Soutar Theatre** at the AK Bell Library. The **first lecture will be FREE** and there will be opportunities to join the society on the evening. Members and potential members will also be able to join the Society at subsequent Section meetings in the traditional manner.

**The first Curious Minds** talk will be held on **Friday, 14<sup>th</sup> October**, doors open at 7.00pm with the lecture starting at 7.30pm. As usual the first lecture of the season is the MacAlpine Lecture and this year’s topic will be “Climate Past and Present”.

We look forward to welcoming you.

Jennifer McKay MA FSA Scot

The full Curious Minds programme is attached

#### CURIOUS MINDS

Date	2016	Title	Speaker	Abstract
October 14		Climate Past and Present	Mike Robinson, CEO Royal Scottish	How the depth of the polar ice-cap impacts

MacAlpine Lecture		Geographical Society	on climate and the contribution of Perthshire man, James Croll, to climate science
October 28	D'Arcy Thompson – Dundee's pioneer of life sciences	Matthew Jarron, Curator of Museum Services, University of Dundee	Possibly the greatest polymath ever, expert in engineering, architecture, philosophy, anthropology, art, cybernetics and his own subject, biomathematics. An early member of PSNS
November 04  With the Ornithological Section	Barn Owl Conservation in Angus	Carol Littlewood, Director, Littlewood Land Care	Habitat creation in upland and lowland areas of Tayside
November 18	Scotland's Jurassic Park: New Dinosaur Discoveries on the Isle of Skye	Dr Stephen Brusatte, Vertebrate Palaeontology, University of Edinburgh	A giant long-nosed, fish-like animal fossil was recently discovered on Skye. Apparently it is not Nessie
December 02	Coca is not cocaine and The Peruvian Highland Clearances	Dr Sabine Dedenbach Salazar, Latin American Studies, University of Stirling	A study of the parallels between the Scottish and Peruvian clearances. And: The relationships between Peruvian coca, cocaine and coca cola.
December 09  With the Archaeological & Historical Section	Mud Wall: a living tradition in the Carse of Gowrie	Tom Morton, ARC Architects, Cupar	For centuries clay has been used as a building material in the Carse of Gowrie. A project to keep this tradition alive.

And in 2017

January 13	Malaria Drug Discovery in Dundee	Irene Hallyburton, Biological Chemistry & Drug Discovery, University of Dundee	An introduction to the process of drug discovery and a description of
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January 27	The Structure of Minerals under Extreme Pressure	Professor Malcolm McMahon, professor of High Pressure Physics, University of Edinburgh	The team uses one of the most powerful lasers in the world to create pressure waves which simulate conditions in the centre of massive planets, a place where matter behaves very strangely indeed!
February 10 With Perth Mountaineering Club	Why Mountains Matter	Professor Martin Price Director of Mountain Studies at Perth UHI	Mountain people and the environments on which they depend, in Scotland and worldwide.
February 24	Throwing some Light on the Human Genome	Professor Wendy Bickmore, Director, MRC Human Genome Unit, Edinburgh	Studying the 3-D folding of the genome and how this controls genome function in normal development and disease.
March 10 President's Evening	Empowering Sustainability in Scottish Communities	Erik McEachern, Director, Scottish Centre for Sustainability, University of Stirling	A recent partnership with SEPA to empower Scottish communities to address sustainability issues.
March 24	How to Detect a Gravitational Wave	Professor Sheila Rowan, University of Glasgow and Chief Scientific Advisor to the Scottish Government	Contributing to one of the most significant scientific breakthroughs of the century which has proved Einstein right – gravitational waves do exist!