# **ASAB Newsletter**

**Summer 2011** 



A note from the Newsletter Editor...

Dear ASAB member,

Welcome to the Summer 2011 edition of the ASAB Newsletter!

In this edition of the Newsletter, we remember pioneer socio-ethologist and ecologist John Crook, whose passion for animal behaviour led him to work on a wide variety of species, including, later in his career, humans. We also look back on the ASAB Easter conference 2011. As usual, we also have a host of notices including ASAB awards available for nominations, a call for proposals for future meetings and the all-new ASAB funding scheme to host an Interdisciplinary Workshop.

As always, we are keen for ASAB members (in particular our student members!) to get involved with the Newsletter, so please send your news, comments or items of interest to include in future editions to me at ASABNewsletterEditor@gmail.com

With all best wishes,

Lisa Collins

### \*In the news...\*

A brief look at some of the animal behaviour coverage in the media this Summer

A new temporary exhibition at the Natural History Museum in London, "Sexual Nature" explores the science of sexual selection with a variety of weird and wonderful examples of different mating systems. Specially commissioned exhibits, live examples, BBC film footage and specimens that have never been displayed publicly before make this a fascinating peek at nature's intimate side. Open until Oct 2 2011. <a href="http://www.nhm.ac.uk/visit-us/whats-on/temporary-exhibitions/sexual-nature/index.html">http://www.nhm.ac.uk/visit-us/whats-on/temporary-exhibitions/sexual-nature/index.html</a>

Richard Dawkins' **The Selfish Gene** has been converted into a 'biomusical' running at this Summer's Edinburgh Fringe Festival. The Selfish Gene: The Muscial combines a science lecture with simultaneous human behaviour examples and features songs about evolutionary stable strategies and the noted Your Monogamous Mother's a Sibling Producing Machine. <a href="http://www.edfringe.com/whats-on/musicals-operas/selfish-gene-the-musical">http://www.edfringe.com/whats-on/musicals-operas/selfish-gene-the-musical</a>

Pasch et al reported a study into what gives **singing Neotropical mice** the X factor in their song performance. In their recent publication in *Animal Behaviour*, they showed that there is a trade-off in bandwidth and trill rate which sets performance limits. In castrated mice, those males given an androgen implant out-performed males without an implant. As in birds, female mice were shown to be more attracted to good singing performances.

Social preferences within a group can lead to **reduced cohesion in collective movement** according to a model published recently by Bode et al in *Animal Behaviour*. In a network-inspired extension of a collective movement model, they showed that the dynamics within a network greatly influences the level of cohesion shown overall in a group. Groups with key individuals with strong connections to others were less cohesive than when these individuals were removed.

# **Obituary John Hurrell Crook BSc, PhD, DSc**

27 November 1930 to 15 July 2011

John Crook, who has died at the age of 80, was a pioneer in the 1960s in the fields known then as social ethology and socio-ecology, disciplines that flourished later as behavioural ecology.

John Crook was educated at Oakmount School, Southampton, Sherborne School, Dorset and University College, Southampton, where he studied zoology. His independent undergraduate study of the gulls of Southampton Water led to his first publication in 1953, and this work helped him to gain a PhD place at Jesus College, Cambridge, where he was supervised by William Thorpe and Robert Hinde. Although his doctorate work was intended to be a field study - financed by the Colonial Office of a single species, the weaver bird Quelea, a serious pest of African crops, he managed to extend the project to a comparative study of the weaver birds (Ploceinae) as a whole - a group of some 50 species - working at first in West Africa and then in India, the Seychelles and East Africa. In India he worked with the great Indian ornithologist Salim Ali, and together they relocated a weaver species lost to science since the nineteenth century.

John Crook's field study of the weaver birds (1962, 1964) pioneered the use of comparative methods in understanding how natural selection shapes display patterns and social organization as responses to environmental selection pressures. Before this the comparative method in behaviour had been largely employed as a tool for the analysis of phylogeny homology, with little application understanding the adaptive nature of behavioural variation between species. His thinking about comparison and adaptation was shaped by his own gull study, which showed him how behaviour is shaped by the interaction of environmental factors, and by conversations with two colleagues. In Cambridge, Peter Marler discussed with him how the variation in singing positions of pipits and skylarks might be understood in terms of selection to be heard and seen by conspecifics; and he noted that Desmond Morris' comparative work in Oxford on finches was hampered from an adaptive analysis by being in the laboratory rather than the field. The correlations between behaviour, diet and habitat that John Crook's work revealed became apparent during field work, rather than being set up a priori, and much later he could still recall the excitement of seeing, in a table he had drawn up, the ecology/behaviour relationships falling into place.

He extended his comparative analysis of the weaver birds to the social organization of the class of birds as a whole (1965), and his work was a major stimulus to David Lack's book length treatment of the same problem (*Ecological Adaptations for Breeding in Birds*, 1968). In that book Lack writes: "Crook's comparative method is that used throughout this book . . . and I find myself in virtually complete agreement with what he established earlier . . ." (p. 4).

Following his PhD John Crook took up a lectureship in the Psychology Department at Bristol University, later being promoted to a Readership in Ethology. He extended his weaver bird work with laboratory studies of the hormonal control of behaviour, and simultaneously started to work on primates. As with his earlier avian work he combined field studies with a broad comparative approach, seeking to understand the adaptive nature of primate social systems. His field research in Ethiopia on the Gelada Baboon and in Morocco on the Barbary Macaque in the mid 1960s were subsequently developed by Robin Dunbar and John Deag, respectively.

His analysis of primate social systems led to the 1966 paper in Nature with Steve Gartlan, Evolution of Primate Societies. This seminal paper established the general principles of primate socio-ecology and - together with his avian work - motivated decades of research on the behaviour and ecology of primates, ungulates, carnivores and birds. In many important ways it laid the foundations for modern behavioural ecology. During the later 1960s and 1970s, John Crook's research group in Bristol became one of the Meccas for research on behavioural ecology, attracting young postdocs like John Goss-Custard, Martin Daly and Richard Wrangham, as well as a host of PhD students. He was a founder member of the Primate Society of Great Britain and was awarded its Osman Hill Medal in 1992 at a joint meeting of ASAB and the PSGB.

John Crook's interest in the evolution of social systems later centred on our own species, stimulated by his year as a Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University (1968-69), where he was introduced to the techniques of humanistic psychotherapy. This new interest led to his book, *The Evolution of Human Consciousness* (1980), and in 1977 he was one of the first people to undertake behavioural ecology studies of humans, initiating a

study of a polyandrous community in Ladakh, in the Himalayas (1988), a mating system he interpreted in terms of the harshness of the environment. This led on to collaborative projects on the social life, agriculture and monastic life of this remote area (Himalayan Buddhist Villages with Henry Osmaston, 1994; The Yogins of Ladakh, with James Low, 1997). This work combined his fascination with the evolution of social structure with a growing interest in Buddhism, which he first sought out during National Service in Hong Kong - before his doctorate studies - in the form of Chinese Zen (Chan) Buddhism (Hilltops of the Hong Kong Moon, 1997). This interest in the spiritual began in his childhood when, at the age of fourteen, he had an experience of "ineffable beauty" in the tranquillity of the New Forest. Seeking to reconcile such experiences with his growing scientific world view led him at length to Buddhism.

John Crook took early retirement in 1987 and began practicing Zen Buddhism, becoming a Chan Buddhist Master in 1993. He formed the Western Chan Fellowship and developed a programme of retreats adapted to Western Zen practitioners, his Buddhist practices influenced by his exposure to

psychotherapy at Stanford. On his return from Stanford he had set up the Bristol Encounter Centre and taught these techniques widely in the UK, and particularly at his retreat centre in mid Wales. His last book was *World Crisis and Buddhist Humanism* (2009), in which he argued for close parallels between a Buddhist and a rational scientific approach to global problems. He was a prolific writer and a lover of remote places.

John Crook died suddenly at his home in Somerset soon after a gathering of his Bristol research group, to celebrate his 80th birthday. His old students and colleagues, who had come from around the world to attend this event, held him in great affection and respect. He was a formative influence on all their lives. He is survived by his sister Elizabeth; Eirene (married in 1958, divorced in 1973); their children Stamati and Tanya and six grandchildren; and by Hazel Russell, his recent partner.

John Lazarus Robin Dunbar

#### John Hurrell Crook (1930-2011)



Photo: Simon Child

# \*ASAB Easter Meeting 2011 – View from the Conference\*

The 2011 ASAB Easter meeting took place at Anglia Ruskin, University, Cambridge on the  $26^{th}$  - $28^{th}$  of April attended by delegates from institutions far and wide.

The meeting was opened by our President, Professor Jane Hurst, with a timely reminder to us all of the importance of ensuring our work has impact both within and outside academia. Her talk encouraged a fair amount of group interaction, and was a fine icebreaker. Dr. Martin Gammel from Galway-Mayo Institute of Technology followed with a presentation on "The Importance of Statistical Power" - a subject that was sure to send a shiver down the spine of at least some of the audience. However, it was clear that the audience took a lot home from this and will no doubt be checking the validity of their experimental design and analyses back at home.

Developing the main theme of the PG workshop day, "Technology into Animal Behaviour", after coffee we were able to choose between several workshops providing an interesting interactive look into some of the technologies being used, or being developed for use, in the field of animal behaviour. These included lab work covering cortisol and stable isotope analysis, to modelling of social networks and Star Logo TNG. Altogether, a fine amalgam of different concepts and ideas that no doubt the attending post graduates will incorporate into their future careers. Moreover, these events provided ample networking opportunities.

During the main conference Professor Kevin Laland gave an excellent plenary on "Studying Animal Culture: Problems and Solutions". It is somehow comforting to hear early on in your career that our elite researchers also experience significant challenges, and enlightening to hear how these are resolved and in many ways accepted as intellectual opportunities. He was inspiring.

The social was typical Cambridge, with academic discussion over much welcomed liquid refreshment and a punt on the Cam in the early evening Spring Sunshine (and no-one fell in!). Very relaxing (for those not presenting on the final day!).

All in all the three days included some 30 talks and 21 posters, squeezed into a shorter period than usual owing to the Royal Wedding. Prior to the presentation of prizes for best student talk and poster, the judges conveyed their appreciation of the high standards that were seen and the difficulties they experienced in making a decision. The relaxed and friendly atmosphere made for ample networking opportunities that no doubt will lead to future collaborations.

Alex Dittrich, Anglia Ruskin University, UK



Photo: Charlotte Evans

## \*The ASAB Interdisciplinary Workshop\*

An exciting new venue for interdisciplinary discussions on current topics at the interface between Animal Behaviour and other disciplines (e.g. Physics, Engineering, Genetics, Psychology...).

**Format**: A 2-day meeting focused on a specific theme comprising invited plenary lectures, selected contributions and the possibility of structured discussions and/or round-table sessions.

**Selection process:** A maximum of one workshop proposal will be selected each year by the Grants Committee using the criteria of scientific excellence, timeliness and inter-disciplinary links, to encourage broad, synthetic topics.

**Funding**: The **ASAB Workshop Grant** will contribute a maximum of £5,000 towards the organisation of the Workshop. The organisers are expected to raise funding to cover additional costs through registration fees and sponsorships. Applicants are also encouraged to seek co-funding with other Academic Societies to ensure the cross disciplinary nature of the workshops.

Eligibility: Any ASAB member can apply for the ASAB Interdisciplinary Workshop Grant.

**Timing of the Workshop**: Applicants will have freedom to identify the most appropriate timing for the workshop, within the calendar year starting 6 months after the submission date.

**Venue**: Applicants should identify their own venue for the workshop to suit specific requirements (logistic, financial...), pending discussion with The Grants Committee.

**Publication output**: Contributions from the Workshop can result in a special (i.e. 13<sup>th</sup>) issue in *Animal Behaviour*, subject to peer review and editorial approval. Successful applicants are responsible for editing a peer-reviewed theme issue for *AB*, to be submitted within 6 months from the completion of the workshop.

Applications should be submitted to Tom Pizzari, Secretary of the Grants Committee, at tommaso.pizzari@zoo.ox.ac.uk no later than 1st November.

More info at: <a href="http://asab.nottingham.ac.uk/grants/index.php">http://asab.nottingham.ac.uk/grants/index.php</a>

## \*ASAB Conference Organisers Sought!\*

We are seeking applications from the membership to organise one of our future ASAB Conferences. Organising an ASAB conference is extremely rewarding, and gives you a chance to create a scientific meeting for the membership in your area of research (Summer and Winter conferences), or support the training of young scientists in our field (Easter conference).

From now on, we will be making an annual call for applications to host ASAB meetings, which will be considered at the Winter Council Meetings. Decisions will be made on applications for conferences that are held in the second year following each Winter Council Meeting. Therefore, this year, we will be looking for offers to host the **2013 Easter Conference** (the Summer and Winter conferences in 2013 already have organisers). In 2012, we will seek applications for the Easter and Winter meetings in 2014 (the summer meeting is an ECBB Meeting held jointly with other European societies). For further information about what's involved in organising a conference, and details of what information an offer to organise a conference should contain, see our website: <a href="http://asab.nottingham.ac.uk/meetings/organization.php">http://asab.nottingham.ac.uk/meetings/organization.php</a>

Offers to organise a conference should be submitted to the Secretary, Candy Rowe (<a href="mailto:candy.rowe@ncl.ac.uk">candy.rowe@ncl.ac.uk</a>), by the deadline.

Deadline for applications: 1st November 2010

# \*Christopher Barnard Award for Outstanding Contributions by a New Investigator 2012 Nominations\*

#### The Award

ASAB Council recognizes that there are many excellent young researchers in the field of animal behaviour whose work will shape the future of our discipline. The ASAB Outstanding Young Investigator Award is given each year to acknowledge and reward the achievements of such researchers. In 2007 this award was re-named the Christopher Barnard Award for Outstanding Contributions by a New Investigator, in recognition of the late President's support of young scientists. The award takes the form of a research grant of £1000 and the recipient is asked to give a keynote talk about their work at the Easter meeting of ASAB (expenses paid). ASAB Council is calling for nominations for the 2012 ASAB Christopher Barnard Award for Outstanding Contributions by a New Investigator, to be presented at the Easter Conference in Aberystwyth (11-13th April). Council seeks nominations that reflect the membership at large, and nominations for women are particularly encouraged as they tend to be underrepresented at the nomination stage.

#### Eligibility

The basis for the award is excellence in research by someone near the beginning of their research career. Recipients must have worked for at least part of their career in the ASAB geographic catchment area. To be eligible, an individual must not be more than 10 years (excluding career breaks) from the <u>start</u> of their PhD work.

#### Nomination procedure

Members of ASAB are invited to nominate one or more candidates using the application form (available on the ASAB website at: <a href="http://asab.nottingham.ac.uk/awards/cba.php">http://asab.nottingham.ac.uk/awards/cba.php</a>). Please use a separate copy of this form for each person you wish to nominate. The form should be accompanied by a full CV of the nominated candidate, the names of 3 referees and an account written by the nominator of up to 300 words describing the nominee's research. Please note a change in procedure - the referees' reports also need to be received by the Secretary by the deadline for the nomination to be considered. We request that the candidate is made aware of their nomination, and also that they would be expected to attend the 2012 Easter Conference to receive their award and give a plenary talk about their work. Please remember that this award is made solely for achievement in research. Members are encouraged to submit the nomination form and all supporting documents via email to the ASAB Secretary, Candy Rowe (candy.rowe@ncl.ac.uk). By 1st November 2011. Please note that only complete applications will be considered. Nominations will be considered by Council at the Winter Council Meeting in early December, and all nominees will be contacted via email after the meeting. The award will be announced on the website and in the Newsletter.

# \*Special Issue of Philosophical Transactions of the Royal Society B: Biological Sciences\*

#### **Culture evolves**

Paper of a Discussion Meeting issue organised and edited by Andrew Whiten, Robert Hinde, Christopher Stringer and Kevin Laland.

*Philosophical Transactions of the Royal Society B,* volume **366**, pages 935-1187.

This special issue contains articles on the evolution of culture, the cultural intelligence hypothesis, social learning, language evolution, stone tool making, and the costs and benefits of using social information.



## \*Winter ASAB Meeting 2011: Why do animals mate with the

### "wrong partner"?\*

1<sup>st</sup> – 2<sup>nd</sup> December 2011, The Zoological Society, London, UK

Organisers: David Shuker and Nathan Bailey, University of St Andrews.

Animals often attempt to mate with partners that appear to be of "low quality". Such partners range from apparently low fitness individuals of the opposite sex but of the same species, through to members of the same sex or even members of a different species, from which no fitness benefits should accrue. In this two-day meeting we will explore the evolutionary causes and consequences of seemingly "sub-optimal" mate choice behaviour. There are two questions we hope will be addressed. First, are behaviours such as reproductive interference between species or same-sex matings within species biologically relevant or merely quirky pathologies that offer little insight? Second, to what extent do mate choices in one context (getting the "right" species or sex, or the "sexiest" partner) inform us about mate choice in other contexts?

We hope to stimulate behavioural ecologists to think again about what we expect from mate choice and to consider whether unusual mate choices may help or hinder our view of mating systems and sexual selection. Although mate choice is our focus, we expect the discussion to be wide-ranging and relevant to those interested in animal decision-making, especially context-dependent choice, and individual variation in behaviour more generally.

## Plenary speakers: Professor Marlene Zuk (University of California Riverside) Dr Karen Pfennig (University of North Carolina).

We are also delighted that **Professor Gene Robinson (University of Illinois)** will be giving the 2011 Tinbergen Lecture during the meeting.

As is traditional, the ASAB Winter Meeting has no fee and does not require registration. However delegates make their own arrangements for travel, accommodation and main meals. For further details and updates about the programme of the conference, please visit our dedicated website:

http://biology.st-andrews.ac.uk/shuker/ASAB-Winter-Meeting-2011.html

### \*ASAB Easter Conference 2012\*

11th-13th April 2012, Aberystwyth University, UK

Organisers: Dr Rupert Marshall and Dr Roger Santer, Aberystwyth University.

As is customary, this conference is aimed at postgraduates and postdocs but anyone with an interest in animal behaviour is welcome to attend. We welcome offers of talks and posters on any aspect of animal behaviour – there is no theme for this conference as we wish all postgraduates and postdocs to have the opportunity to present their research.

The first day, Wednesday 11<sup>th</sup>, will feature the traditional **postgraduate workshop** including an optional visit to the local red kite conservation centre. The main conference proceedings will be held on Thursday 12<sup>th</sup> and Friday 13<sup>th</sup>, with a conference barbecue on the Thursday evening.

Aberystwyth is set amongst spectacular scenery on the west coast of Wales in the middle of Cardigan Bay. Dolphins can be seen from the seafront while red kites circle overhead. Budget on-campus accommodation is available in the Pantycelyn student residence, just 3 minutes' walk from the conference hall on the Penglais campus, itself a short walk from the seafront, town centre and railway station.

For further details please see the conference webpage:

http://www.aber.ac.uk/en/ibers/events/asab-easter-conference-2012/

Registration and abstract submission will open in Autumn 2011.