

## Stephen Debus - 2<sup>nd</sup> Chat session 8/25/12

12:00 stephendebus: ok - are we ready

12:00 feather1: yes please

12:00 myopixia: on both occasions when new hatchling just at head pop-up stage, parents duetted off nest. Coincidence? Has this been observed before?

12:02 stephendebus: It's possibly a coincidence, people have speculated that it's some kind of announcement but we don't really know.

12:02 myopixia: thanks!

12:01 fitzwilliam: clarification, please, on partial incubation in wbse. last season s1 and s2 were hatched 29 hours apart; laid three days apart; this season marked change in amount of time mum spent off the nest after laying s3 egg and three days later after what we think was laying of s4 egg. Did she partially incubate the first to slow its development and move hatchings closer together?

12:07 stephendebus: They laid a few days apart last year, probably similar this year but we aren't sure of exact hatch time this year, so hard to tell / probably normal.

12:07 emmTas: and we are not sure of egg 2 lay date this year either

12:02 tiredbones: when do seaglets's vision develops fully?

12:03 emmTas: just discussing vision question before answering

12:04 stephendebus: They can focus on things within their immediate vicinity quite quickly

12:07 openwings: What is the average lifespan of WBSE in the wild?

12:08 stephendebus: Not enough birds banded or marked to know for sure. At a guess between 15-20 years based on size

12:08 feather1: After hatch do siblings usually catch up with each other in size/development and if so at what stage?

12:09 stephendebus: There was a formula that someone came up with that they were able to correlate size and age. A little bit complicated depending on which sex they are. Also the hatch order, second is at a disadvantage.

12:11 stephendebus: Geoff says around 9-10 weeks based on the 2010 pair.

12:09 jocast1: We know that Bald Eagles have a poor sense of smell, since WBSE bring eucalyptus leaves in daily, does that indicate they are more sensitive?

12:12 stephendebus: They are often aromatic, so possibly insect repellents. Nothing to do with smell.

12:13 tiredbones: Do WBSE delay total brooding of first egg until 2nd egg laid, so the hatch dates will be closer together? Thus less of a disadvantage for 2nd chick.

12:15 stephendebus: There is a noticeable gap in the incubation between first and second egg here at Newington. In general, not enough hard data or research available

12:14 jocast1: Does the length of time that a pair of WBSE's are together have any bearing on their ability to successfully fledge eaglets?

12:16 stephendebus: Not enough information. WBSE are not studied well enough. ie. consistent tracking of one or more pairs

12:17 stephendebus: Any more questions?

12:17 jocast1: Earlier you mentioned that transmitters had a negative effect on birds but then mentioned that studies had not shown the same in raptors?

12:18 stephendebus: It wasn't a blanket no effect with raptors, I think it depended on the type of transmitter and where it was put on the bird and may be related to what was being measured eg. foraging success. breeding success and time spent preening - feather maintenance.

12:20 stephendebus: Emm is looking for the paper so we can reference it for you.

12:18 swanlady4eagles: any plans to more consistently track WBSEs?

12:21 stephendebus: Not unless someone funds it. Reasons could be environmental impact etc.

12:18 greentea429: i don't know if my question was asked in earlier session. It was about one honking much faster than the other, and is that a male / female thing or something?

12:22 stephendebus: Greentea - male honking rate is faster. No additional detail available that I know of.

12:22 greentea429: Cool. Thx.

12:22 stephendebus: Any more questions?

12:22 fitzwilliam: are there studies that show a difference in survival rate between hatchlings in urban areas like SOP and those in more isolated areas?

12:23 stephendebus: There has been one done on Peregrines, not WBSE. Rural won.

12:24 feather1: do many nests in use fail?

12:25 stephendebus: feather – WBSE?

12:25 feather1: yes sorry

12:27 stephendebus: Feather - .8 young per pair per year, allowing for the fact that some nests raise two. So around half may fail.

12:28 feather1: ty

12:28 stephendebus: At Jervis Bay success rate is higher so it depends on the context of the nest and whether area is protected

12:24 fitzwilliam: differential survival rate between male and female fledglings?

12:26 stephendebus: Fitz - there is some data for various species that suggests females have a higher mortality rate in their first year.

12:26 fitzwilliam: any ideas why that might be, Dr. Debus?

12:29 stephendebus: Fitz - possibly related to size as females are larger and less agile hunters. Therefore they tend to eat more carrion and possibly get poisoned and suffer collision injuries etc.

12:25 priscillash: QQ do you Stephen have a favorite raptor

12:25 stephendebus: Little Eagle is favourite raptor

12:26 priscillash: ty

12:26 greentea429: Why is that your fave?

12:30 stephendebus: My favourite because I cut my raptor teeth on them at a time when they were an unstudied species.

12:30 stephendebus: They're a spectacular bird. Great attitude.

12:31 openwings: I just read Little Eagle is a relative of the Haast's Eagle is that true?

12:33 stephendebus: openwings - that conclusion was based on DNA evidence and that relationship includes the booted eagle.

12:28 priscillash: QQ is there any plans on installing cams for the little eagle?

12:32 stephendebus: Cams on Little Eagle - not by me. Someone may find a suitable nest and put camera up.

12:32 priscillash: ty that would be awesome

12:30 fitzwilliam: is lead poisoning a serious problem for raptors in Oz?

12:31 stephendebus: There are known cases, possibly the tip of the iceberg.

12:31 stephendebus: ie. not reported.

12:34 emmTas: interestingly Steve is saying all his research is done in spare time for the love of it ... there's no research funding on offer

12:34 tiredbones: do you know how great you are to answer our questions so patiently? Thank you Dr. Debus!

12:34 swanlady4eagles: we are grateful

12:34 emmTas: thankfully he has been prepared to do that or we would know even less

12:35 jocast1: Dr. Debus, it has been an honor to speak with you. Thank you so much for your kindness, expertise, and the amazing research that you do.

12:35 fitzwilliam: we are eager to learn, Dr. Debus, and appreciate so much your taking time to answer our questions

12:35 emmTas: and a plug for our cam here as it's feedin very important observations inot what is known

12:35 feather1: We are most grateful Dr Debus

12:35 openwings: true emm. This nest good study for the area

12:35 cando3333: Dr. Debus, thank you so much for devoting your time to this research, we so appreciate it and you.

12:35 emmTas: he is reading all your comments so thanks. we might wrap things up as he has been on the go for hours

12:36 mariacanada: thankyou dr. debus

12:36 greentea429: ditto that -thank you :)

12:36 openwings: just an honor to have his expertise here. Thank you for answering our questions!

12:36 mmdutch: thank you so very much Dr.Debus awesome work

12:36 stephendebus: You're all welcome - maybe some other time.

12:36 cando3333: Good bye Dr. Debus, and a big thank you for answering questions

12:36 openwings: looking foward to any publishings too

12:37 stephendebus: Thanks again, bye.

12:37 Myndy1: All of the above .. thank you :)

12:37 openwings: thank you!