

From: [Dan Grout](#)
To: [Russell Bradley](#); [Jaime Jahncke](#); [Barbara A Holzman](#); gary_fellers@usgs.gov
Cc: 'Gerry_McChesney@fws.gov'; 'hbshaffer@ucdavis.edu'; 'James_Bettaso@fws.gov'; 'Jonathan_Shore@fws.gov'; [Derek Lee](#); 'Joy_Albertson@fws.gov'; [Jim Tietz](#); [Nick Holmes](#); [Pete Warzybok](#); [Ryan Berger](#); [thad shelton](#)
Subject: Salamanders, Veg, Cricket monitoring
Date: 08/22/2012 10:48 AM

Sally Team:

It was great reviewing the pre/post mouse eradication monitoring design strategies for salamanders with you all on Monday. I'll share my meeting notes with Nick Holmes, our Director of Science, and discuss ways we (IC) could assist in the review or development of the salamander survey protocols while Russ is on PTO this month. I will look into the loan of IC's camera equipment and funding. We will get back to Russ and Jaime on these issues.

Gary: Great to meet you....thanks much for your helpful advice. Please include me in any emails regarding scheduling Pt. Reyes sally spotlighting training you might do with Russ and Pete in the next few months.... I've done a lot of herp surveys (mostly RLF) but would like to hone my sally spotting skills prior to spending time on the island this fall/winter.

Barbara: It was great to finally meet you. I will get you the mouse maps and data to you when I return from PTO next week. Nick can direct you to the UCSC CCAL lab who can assist in providing advice about how to best design veg studies to detect rapid post-rodent-eradication changes....we have done this on many islands before.

Russ and Gerry and I have tentatively scheduled an **Oct 2 meeting** to go over study design issues for the **vegetation and camel cricket monitoring** (pre-post eradication), so they are ready to go this fall...which is here already! ***Perhaps at that meeting we could also review the final details of the Salamander methods?***

Jonathan: please keep me in the loop on any developments/field trips/meetings with respect to any monitoring design issues (veg or otherwise) that are linked to the proposed mouse eradication project. Thanks!

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*"Island Conservation is the world's most effective organization
in terms of species saved from extinction per dollar spent."*

- Michael Soule, Cofounder, the Society for Conservation Biology

From: Jaime Jahncke [mailto:jjahncke@prbo.org]
Sent: Monday, August 20, 2012 1:16 PM
To: James_Bettaso@fws.gov; Dan Grout
Cc: 'Gerry_McChesney@fws.gov'; 'hbshaffer@ucdavis.edu'; 'James_Bettaso@fws.gov';
'Jonathan_Shore@fws.gov'; Derek Lee; Barbara A Holzman; gary_fellers@usgs.gov;
Joy_Albertson@fws.gov; Jim Tietz; Nick Holmes; Pete Warzybok; Ryan Berger; Russell Bradley; thad
shelton
Subject: Modified Technique for Spotlighting Amphibians and Reptiles

FYI

From Gary Fellers.

From: James_Bettaso@fws.gov [mailto:James_Bettaso@fws.gov]
Sent: Monday, August 20, 2012 12:05 PM
To: Jaime Jahncke
Cc: 'Gerry_McChesney@fws.gov'; 'hbshaffer@ucdavis.edu'; 'James_Bettaso@fws.gov';
'Jonathan_Shore@fws.gov'; Derek Lee; Barbara A Holzman; gary_fellers@usgs.gov;
Joy_Albertson@fws.gov; Jim Tietz; Nick Holmes; Pete Warzybok; Ryan Berger; Russell Bradley; thad
shelton
Subject: gene flow in black salamanders MS thesis from HSU

here is a MS thesis on black salamanders. Sean is at UC Berkeley now, and may be working
to publish this.

(See attached file: *S.Reilly_Thesis_HSU.pdf*)

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▼ Jaime Jahncke <jjahncke@prbo.org>

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08/08/2012 06:47 PM

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cc

Subject: AGENDA: ARBOREAL SALAMANDER
MONITORING (Monday, August 20 @
9:30AM)

Hi all:

Here is the agenda for the arboreal salamander planning meeting we scheduled for
Monday August 20 at PRBO.

Thanks,

Jaime Jahncke, PhD
California Current Director
707-781-2555 ext. 335

From: Jaime Jahncke
Sent: Monday, July 30, 2012 2:01 PM
To: Jaime Jahncke
Subject: ARBOREAL SALAMANDER MONITORING

Hi all:

Thank you for responding to the Doodle Poll.

We are planning on having the workshop on **Monday August 20 at PRBO**.

If this date didn't work for you... please try to see if you can move things around to be able to participate.

We will be e-mailing a draft agenda and specifics in the next few days.

Thanks,

Jaime Jahncke, PhD
California Current Director
707-781-2555 ext. 335

From: Jaime Jahncke
Sent: Monday, July 23, 2012 3:42 PM
To: Jaime Jahncke
Subject: FW: ARBOREAL SALAMANADER MONITORING (DRAFT)

Hi all:

We are planning a meeting to gather advice on how to best expand existing arboreal salamander studies on the Farallon Islands to meet the following goals: 1) gain additional knowledge about the distribution and abundance of Farallon arboreal salamanders across island habitats, and 2) increase detect ability of juvenile salamanders, a key metric for assessing population impacts related to restoration efforts.

Please let us know your availability by selecting appropriate dates in the DOODLE link <http://doodle.com/mhhh84v5g8x2v7u3>

DESIGNING AN ISLAND WIDE ARBOREAL SALAMANADER MONITORING ON SOUTHEAST FARALLON ISLAND

PRBO will design methods to monitor the abundance and distribution of arboreal salamanders across habitat throughout Southeast Farallon Island. The design will likely include a stratified sampling design driven by an appropriate habitat proxy (i.e., vegetation, substrate, soil moisture, etc) that would involve establishing additional sets of paired cover boards (or other comparable methods) across habitat types, providing a broad survey area and effort above and beyond current methods. Monitoring would be paired with basic habitat assessments that would help identify drivers that determine differences in distribution and abundance of salamanders across the island (i.e., soil moisture, substrate, prey, vegetation). These new cover boards would likely be surveyed once every month throughout the rainy season (November through May) – documenting numbers of salamanders detected by size class and reproductive state.

BACKGROUND

The arboreal salamander, *Aneides lugubris*, is a California near-endemic, occurring from Humboldt County to northern Baja California. It is the only year-round native terrestrial vertebrate inhabiting the South Farallon Islands. Salamanders are active at the surface during the rainy season (approximately October-May yearly), but retreat into crevices, burrows and hibernacula during dry weather (approximately May-September yearly). Eggs are deposited in June/July in clusters of 12-18 with adult females standing guard over their eggs and recently hatched young for approximately 3 months. The young of each year can be first detected in the early fall. In 1974, Boekelheide area-searched along a transect from the marine terrace up to the lighthouse and found the greatest densities on the talus slope above PRBO house and on the cliff below the lighthouse. Beginning in 2005, a long term monitoring study utilizing biweekly surveys of cover boards (30cm x 30 cm) throughout the rainy season was initiated by PRBO Conservation Science to assess inter and intra annual trends in salamander populations, demography, and reproduction in a limited area of Southeast Farallon Island.

Localized management activities at the South Farallon Islands could impact salamanders, particularly if chemicals are used extensively. There may also be positive effects of mouse eradication due to removal of competitors for insect prey. Baseline data are critical to documenting effects of existing and future changes to salamander populations. While current monitoring methods for salamanders on Southeast Farallon have produced valuable data on metrics like adult survival, there are still data gaps relating to the distribution of animals across the entire refuge as well as low detectability of juveniles – a key benchmark for assessing changes in the salamander population.

Thanks,

Jaime Jahncke, PhD, *California Current Director*
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www.accessoceans.org | Please follow ACCESS on [Facebook](#)!

PRBO conserves birds, other wildlife, and ecosystems through innovative scientific research and outreach.

[attachment "Salamander Meeting Agenda.pdf" deleted by James Bettaso/R3/FWS/DOI]