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To: [Gabrielle Feldman](#); [Gerry\\_McChesney@fws.gov](mailto:Gerry_McChesney@fws.gov)  
Cc: [Russell Bradley](#)  
Subject: My Summary of the Burrowing Owl diet data for EIS  
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Gabrielle, Russ:

Here is my summary of Sara Chandler's Owl Data for the EIS:

Research Period: ~Oct 1 2010 - May 15 2011: ~ 8 months

Approximately 9 owls captured and tracked; several owls were not captured.

412 pellets (896 prey items) collected and analyzed from banded owl roosts;

267 pellets were also collected from unbanded owls (722 prey items);

**Totals = 679 pellets; 1575 prey items: 453 mice; 98 birds (82 ASSPs); 1067 inverts.**

From Oct 1 to Dec 31, mice were >60% of the items in the owl diet, peaking in November (<2% birds during this time: No ASSP LESP or CAAU);

From Jan 1 - May 15, however, mice were only 9% of diet, and birds were ~47% (ASSP show up in diet beginning in January).

82 petrels were found in owl pellets. Of all the birds eaten by owls, ASSP/LESP made up 85% of all birds eaten. Most ASSPs eaten in Feb - March - April

Inverts <2-3% of diet from Sept- Dec 30, but in January they increase dramatically (>30% of prey items by number, but biomass still very small)

Overall inverts make up 67% of the prey items in owl diet over the winter, and over 42% of those inverts were endemic Farallon camel crickets!

**I calculated the relative % of biomass of mice vs petrels taken by owls for these two similar length time periods:**

**Oct 1- Feb 1:**

There were 229 mice @ 15g = 3435g over 8 weeks; No ASSP taken, so....

**Biomass percentages are: ASSP+CAAU = 0%; Mice = 96%; (Inverts = ~3%? by weight)**

**Feb 1 - May 15:**

There were 9 mice @ 15g = 135g over 7 weeks; and there were 82 ASSPs x 38g = 3116g  
ASSPs + 2 CAAU@50g? = 3216 g ASSP/CAAU;

**Biomass percentages are: ASSP+CAAU= ~94%; Mice = 4%; (Inverts = ~2%? by weight)**

This summary seems to represent the relevant items of the study for the EIS.

Do you have any questions or comments? Perhaps a better total biomass (and invert) calculation is needed?

This should be added to purpose and need section, I think, yes?

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- **Michael Soule, Co-founder, the Society for Conservation Biology**