Sea lion field data

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November 25, 2014



Goals

- Quality data on sea lion tagging and resighting
- A transparent process, with high integrity
- Efficient, reliable and effective



Three components

- 1 Improve existing data capture process
- 2 Establish a server in the hut
- 3 Trial handheld field data capture



Current process

- Entry of data in field notebooks
- Copied from notebooks into spreadsheets
- Spreadsheets uploaded into the New Zealand sea lion demographic database



Issues and opportunities

- Data entry is laborious
- Upload into the database isn't happening until back on the mainland, removing opportunity for validation while memories are fresh
- Opportunities to include photographs, and notebook scans alongside the sightings records
- Opportunities to move to electronic data capture



List of New Zealand sea lion sightings

The database is searched by adding filters into the text box. The filters all have the form of a name, followed by a colon, and then the value, e.g., reason:2012, Multiple filters are separated by spaces. Active filters are shown above the search box, and may be removed by clicking on the cross next to them. A description of the possible filters and values is given here.

Sealion: 20090117-H281 × Island: ENDERBY X

sealion:20090117-H281 island:ENDERBY

▲ Date	Location	Tag?	Chip?	Brand?	Event?	Sealion?	Sex?	Age class?	Status?	Details
07 Mar 2014	SANDY BAY, ENDERBY	PP C H281 L1,R1			Resight (Tag)	20090117-H281	Female			\bigcirc
14 Feb 2014	SANDY BAY, ENDERBY	PP C H281 L1,R?			Resight (Tag)	20090117-H281	Female			\bigcirc
14 Feb 2014	SANDY BAY, ENDERBY	PP C H281 L?,R1			Resight (Tag)	20090117-H281	Female			\bigcirc
08 Feb 2014	SANDY BAY, ENDERBY	PP C H281 L1,R1			Resight (Tag)	20090117-H281	Female			\bigcirc
03 Feb 2014	SANDY BAY, ENDERBY	PP C H281 L?,R1			Resight (Tag)	20090117-H281	Female			\bigcirc
03 Feb 2014	SANDY BAY, ENDERBY	PP C H281 L?,R1			Resight (Tag)	20090117-H281	Female			\bigcirc
03 Feb 2014	SANDY BAY, ENDERBY	PP C H281 L1,R1			Resight (Tag)	20090117-H281	Female			\bigcirc

Search 0

33 sightings selected

Download selected data as CSV

edward@dragonfly.co.nz -

Explore About

Sealion sighting

Date	07 Mar 2014
Location	SANDY BAY, ENDERBY
Tag	PP C H281 L1,R1
Chip	None
Brand	None
Event type	Resight (Tag)
Sex	Female
Age class	None
Status	
Sight status	1
Behaviour comments	A
Sealion	20090117-H281 Sightings Details
Sighting loaded 01 Sep 2	2014 10:53:59 by admin. record number=DJHa2176 notebook number=DJH*2014B recorder=DJH

Edit

245





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Principles

- Build on existing data collection protocol
- Clear separation of data entry (captures information from the notebooks) and reconciliation (resolves any issues)
- Copies of source information (scanned or photographed notebooks)
- All changes to the data are captured
- Documentation of process



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- 1 Parties						
STAA	1374	E	rd	1445		
241 09	LPRZ	33	Aq	SB	B	
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8479	LORI	YC	Aq	SB	ß	NA MA
4284	LIR?	OL	Ang	53	ß	(H wp
1000						
HMR H 2.83	LIRZ,	OC	12	SB	ß	H NP
E030	LIRI	BC	SAM	SB	B	Ph.
KZ97	LIRI	BC	SAM	SB	B	PM
-				10	R	14 NP



Data entry

edward@dragonfly.co.nz *



Reconcile form View entered forms.

Already reconciled by Simon on Wed 16 Jan, 15:48

Sealion sighting form

Form number

blc123

	Date	Location	Island	Tag				Brand	Brand Chip	Sex	Behaviour	ur Pup tag		Comments		
	Date	Location	Islanu	С	S	N	L	R	branu	Cillip	367	comments	С	N	Comments	
1	16/01/2013	SANDY BAY	ENDERBY	PP	С	H285	1	?	N	NC	F	HAREM				>
2	16/01/2013	SANDY BAY	ENDERBY	BB	С	H197	1	?	N	NC	F	HAREM				>
3	16/01/2013	SANDY BAY	ENDERBY	Y05	С	5509	?	1	N	NC	м	PERIPHERAL				>
4	16/01/2013	SANDY BAY	ENDERBY	G05	С	5708	?	1	Ν	NC	F	HAREM				>
5	16/01/2013	SANDY BAY	ENDERBY	G05	С	6097	1	1	N	NC	F	HAREM				>
6	16/01/2013	SANDY BAY	ENDERBY	ww	С	1278	1	?	N	NC	F	HAREM				>
7	16/01/2013	SANDY BAY	ENDERBY	PP	С	V742	?	1	N	NC	F	HAREM				>
8	16/01/2013	SANDY BAY	ENDERBY	PP	С	1912	?	1	N	NC	F	HAREM				>
9	16/01/2013	SANDY BAY	ENDERBY	Y04	С	5122	1	?	N	NC	F	HAREM				>
10	16/01/2013	SANDY BAY	ENDERBY	PP	С	H284	?	1	Ν	NC	F	HAREM				>
11	16/01/2013	SANDY BAY	ENDERBY	B03	С	4451	1	1	Ν	NC	F	HAREM				>
12	16/01/2013	SANDY BAY	ENDERBY	BB	С	P556	1	1	N	NC	F	HAREM				>
13	16/01/2013	SANDY BAY	ENDERBY	PUR	С	7282	?	1	N	NC	F	HAREM				>
14																
15																
16																
17																
18																

Before this field season (by mid-December)

- Refactor sightings data entry to reflect notebooks precisely
- One screen per day's sightings by a single person at a single location
- Metadata (start and end time, beach, person, other information) entered once
- Addition of a sighting 'id' number (1, 2, 3, ...) on each line in the notebooks
- Include some autocomplete during data entry
- Allow scanned or photographed notebooks to be associated with the entry screens
- Possibly allow for photographs to be associated with sightings
- Improvement of reconciliation information



New Ze	aland se	a lion demogra	aphics Explore Ab	out Download D	ata entry		rich	ard@dragonfly.co.nz 🔻
	CSV f	ile: Browse N Validate file	No file selected.					
nzsl-ai-2	2014-resight	ing-data-00.csv: 999	rows total, 0 rows with errors,	980 rows with one match	n, 13 rows with mu	Itiple matches, 6 rows wit	th no matches.	20000115-0219
For sighting Hover over belongs to t								
Row	No	Record	Notebook	Recorder	Status			Chip: 00-01C7-FABF
28	27	ADM27	ADM*2014A	ADM	5 matches	20000115-0219	Brand: 219	
							20000115-0229	Last seen: 08 May 2000
							20000115-0239	TEAL LAKE, ENDERBY
							20000115-0249	Sex: Female Status: New born or pup
							20000115-0289	Age class: Pup
							Sea lion code	Details
88	87	ADM87	ADM*2014A	ADM	No matches	tag:00:R:B086	+	All sightings of 20000115-0219
					No matches No matches	tag:orange:R:B086 tag:?:R:B086		
180	179	ADM179	ADM*2014A	ADM	8 matches	brand:19?	20000115-0190	
							20000115-0192	
							20000115-0193	
							20000115-0194	
							20000115-0195	
							20000115-0196	
							20000115-0197	
							20000115-0198	
							+	

New records

Ability to add further information to the sightings

- Record #
- Notebook #
- Recorder
- Appt. tag colour
- Pup tag colour
- Pup tag number
- Comments



Computer infrastructure

- Database is web based
- Needs a web-server
- Will set up database on a Mac mini
- Small computer providing backup and wireless functionality
- Test in Wellington, switch on Enderby, and it will just work



Field data entry

- Develop an electronic version of the notebook
- Run on an iPhone or similar, in a waterproof case
- Will remove the data entry step
- Fit with DOC's broader data entry policies
- Aim to trial this season, with two devices going to the Auckland Islands in mid January

