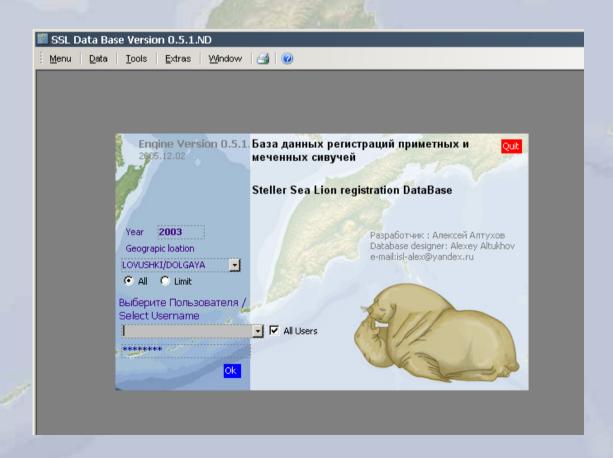
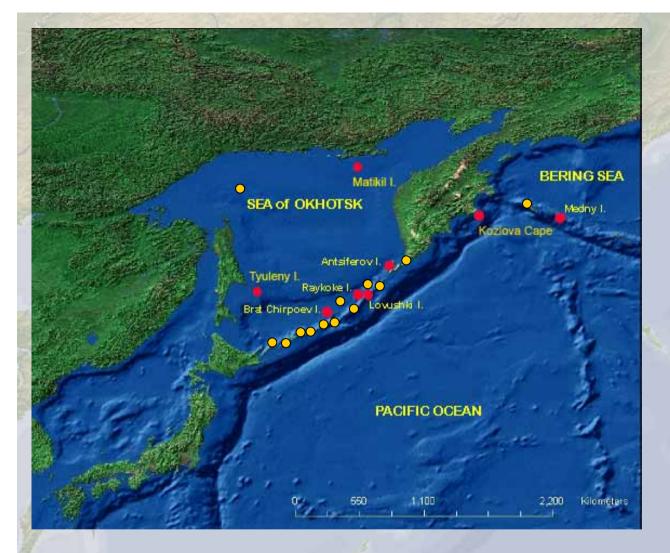
#### Russian Steller Sea Lion database

Alexey Altukhov Lomonosov's Moscow State University, Russia January 17, 2005





Steller sea lions in the Russian Far East have been regularly branded since 1989.

Since 2002, extended observations have been performed on 7 of the major rookeries

Also other rookeries and haulouts are surveyed regularly.

The main objective is the resighting branded animals for estimation of population parameters: mortality, migration, reproductive success, and other demographic data.

#### What's the Database for?

Over the years lots of data has been collected ... but these data were collected by different people in different places at different times using different recording and archive methods.

So we have problems in unification and analysis of the data.

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So we have problems in unification and analysis of the data.



Also, since using photo-identification, we need to double-check observations: sometimes reading a brand is difficult.

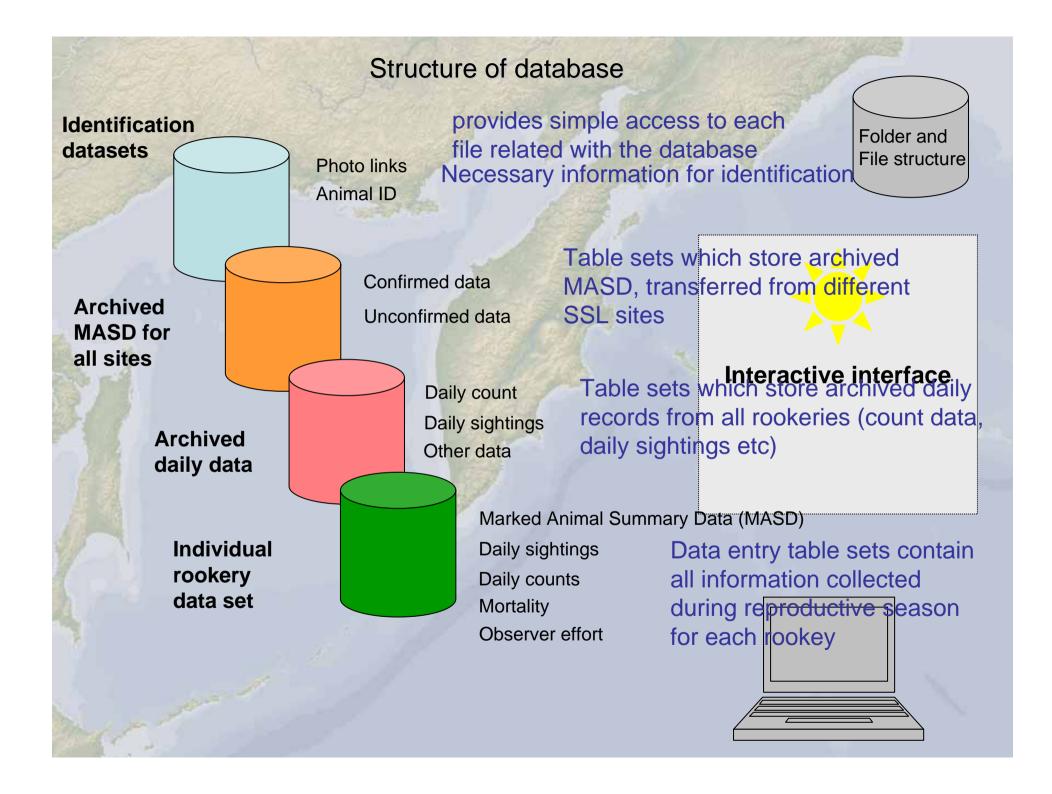
# Main purpose for database:

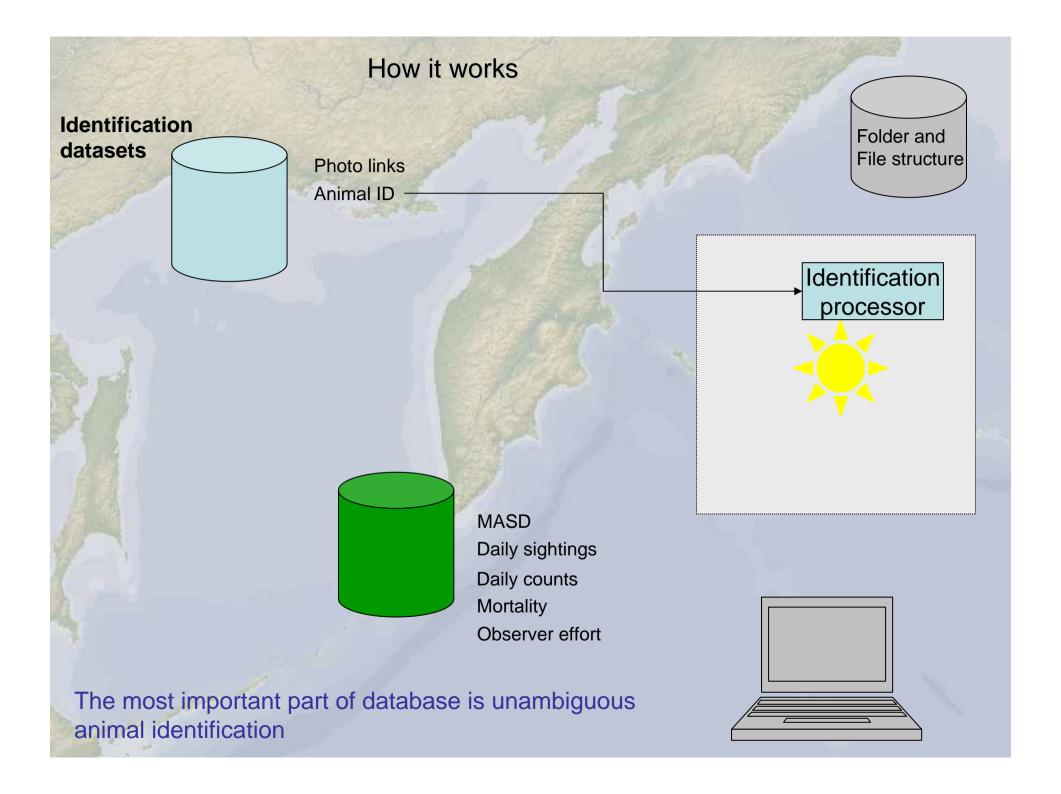
The creation of a universal system for the recording and archiving of data on resightings and long-term monitoring of branded and naturally marked Steller sea lions in Russia.

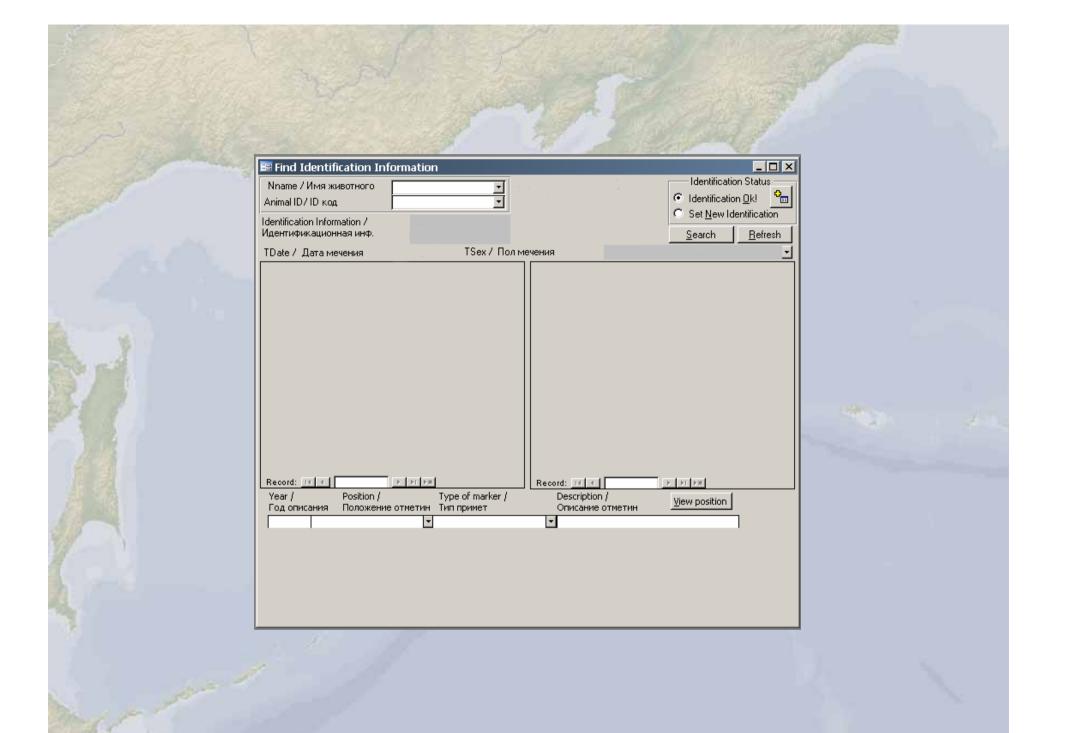
- 1- Provide unified data structure on all data-collection locations
- 2- Provide reliable animal IDs.

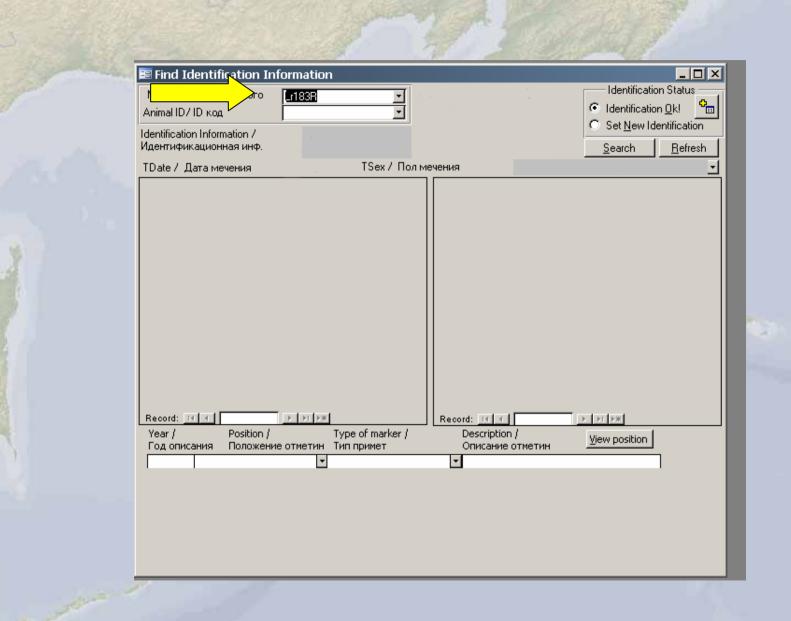
By integrating photo-ids and detailed descriptions of natural markings, we hope to bring the number of false ID's to 0

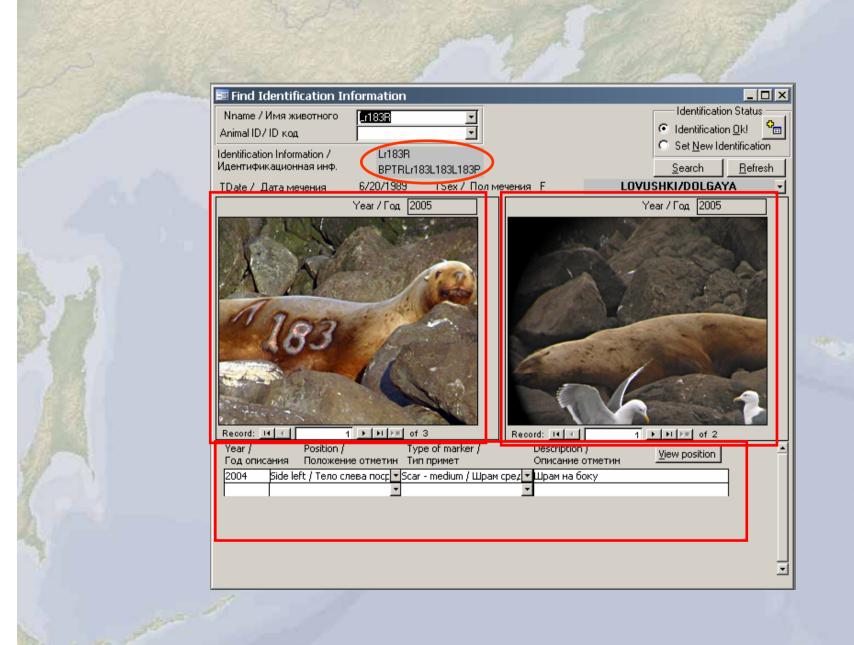
- 3- Provide control and consistency of data-entry for all observers
- 4- Create a verification and double-checking procedure of collected data
- 5- Provide for automated unification of data.

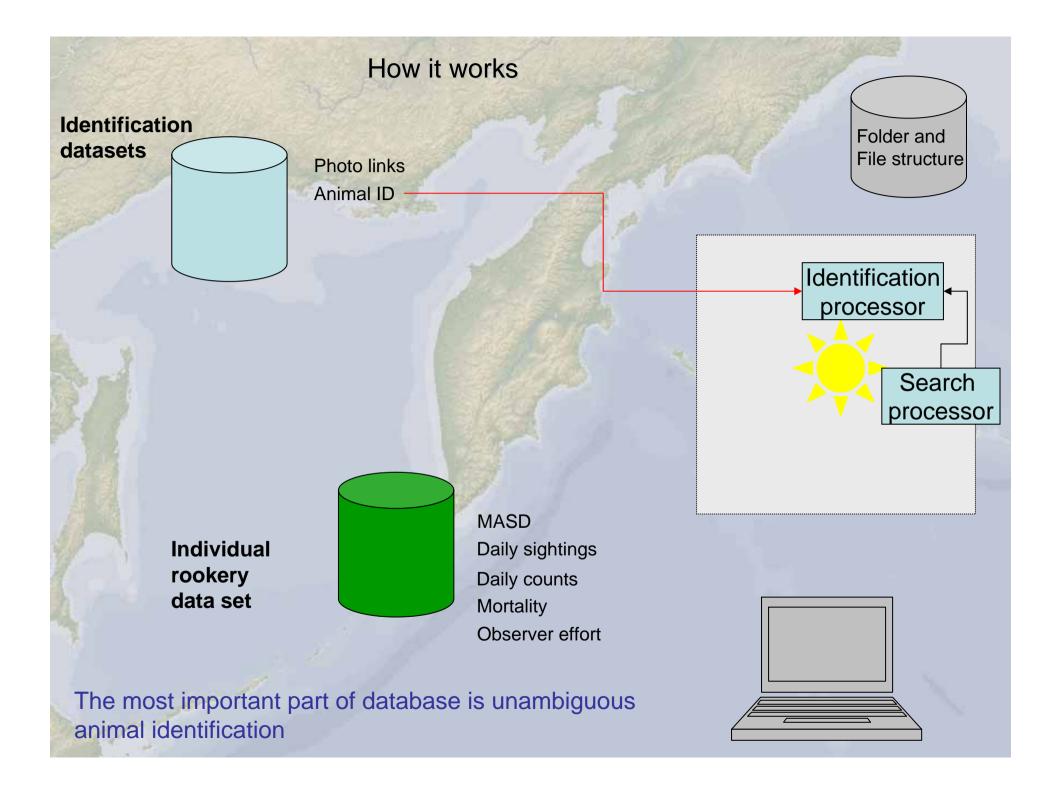


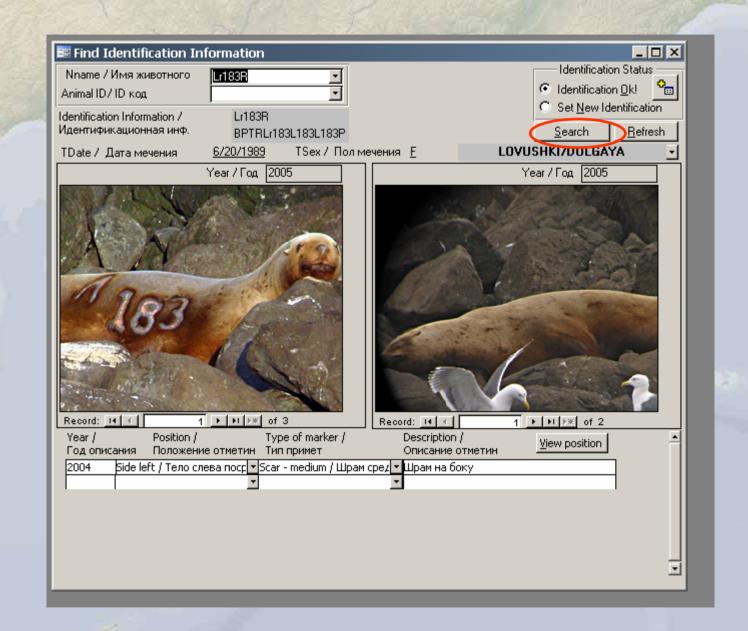


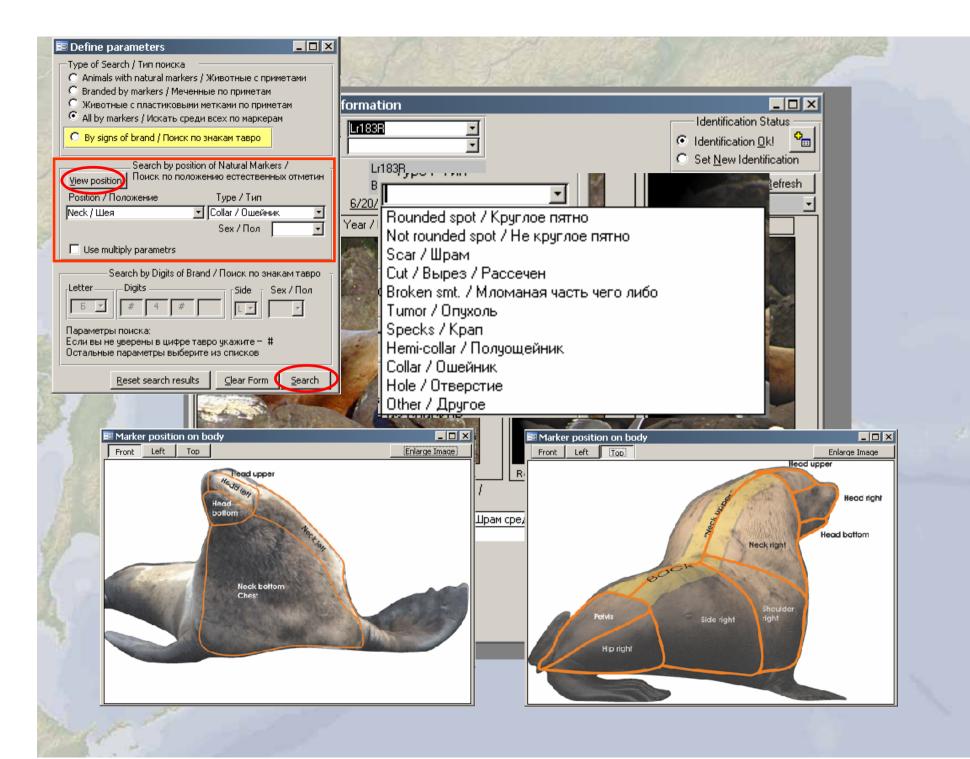


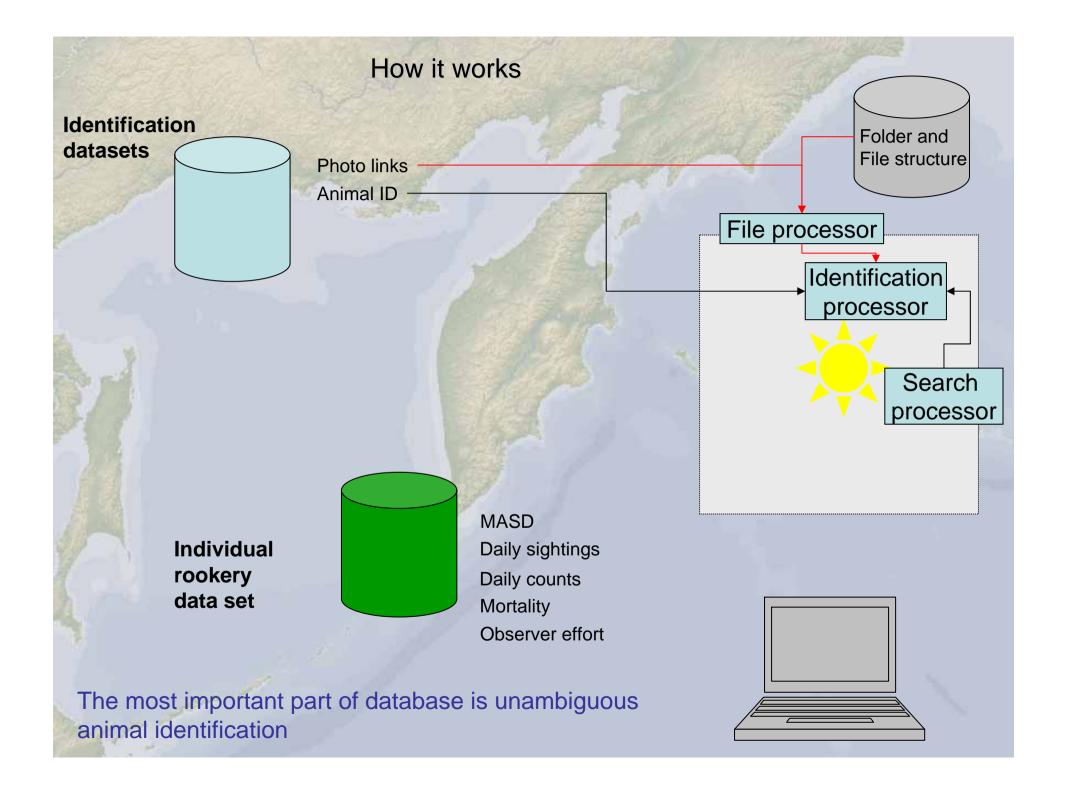


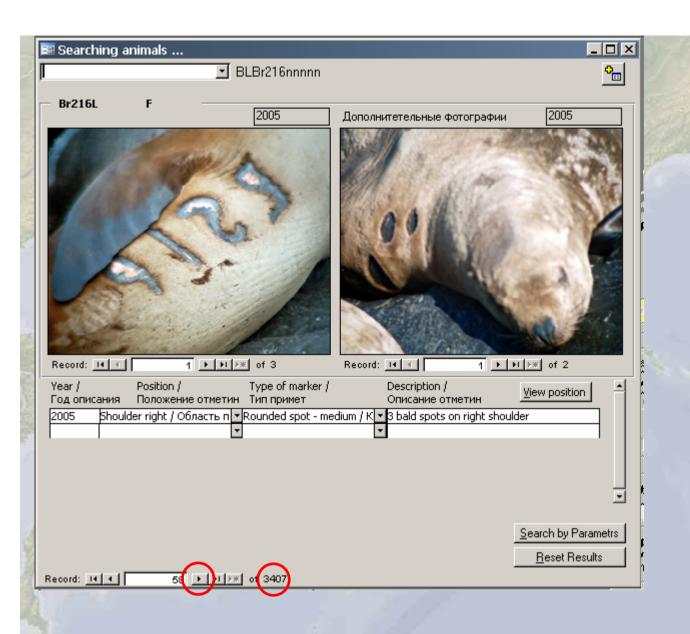


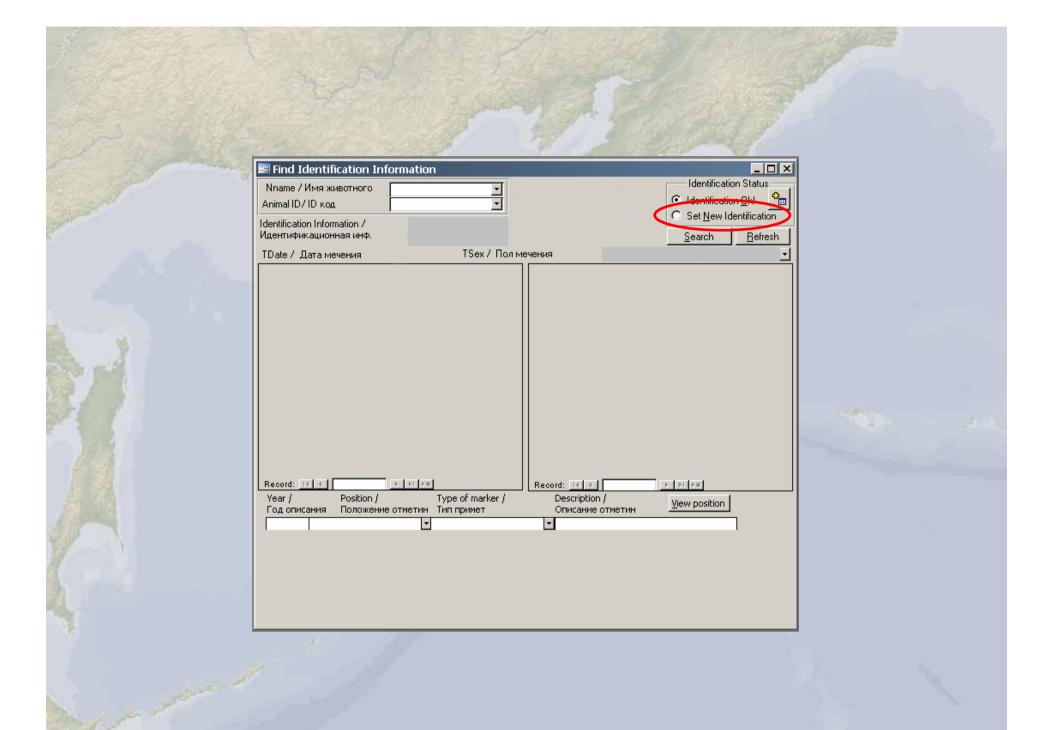


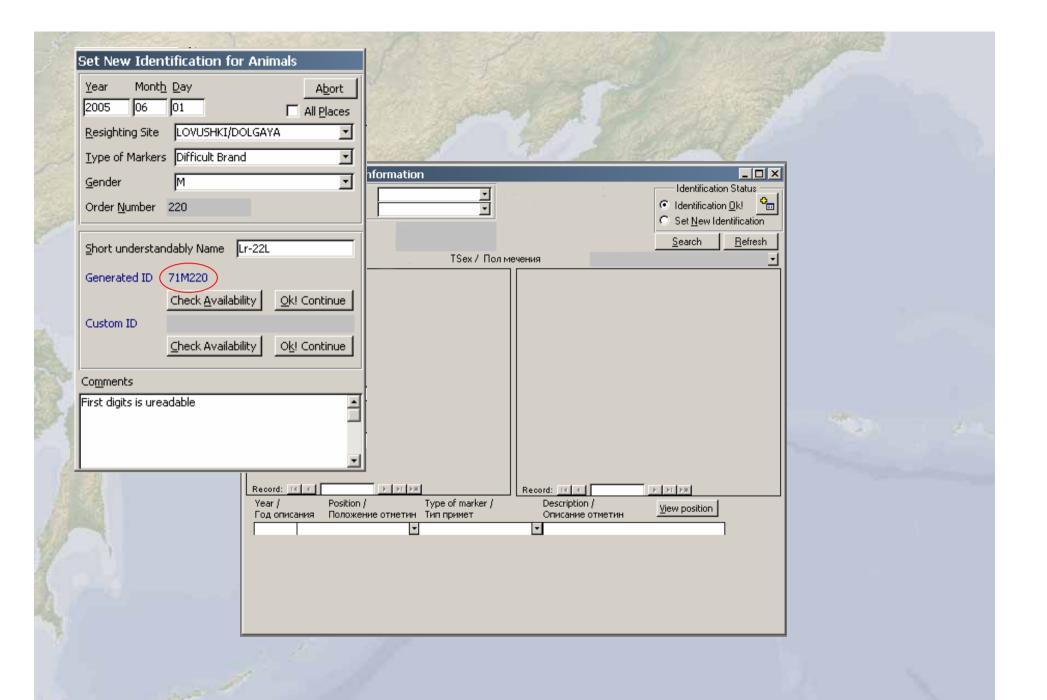


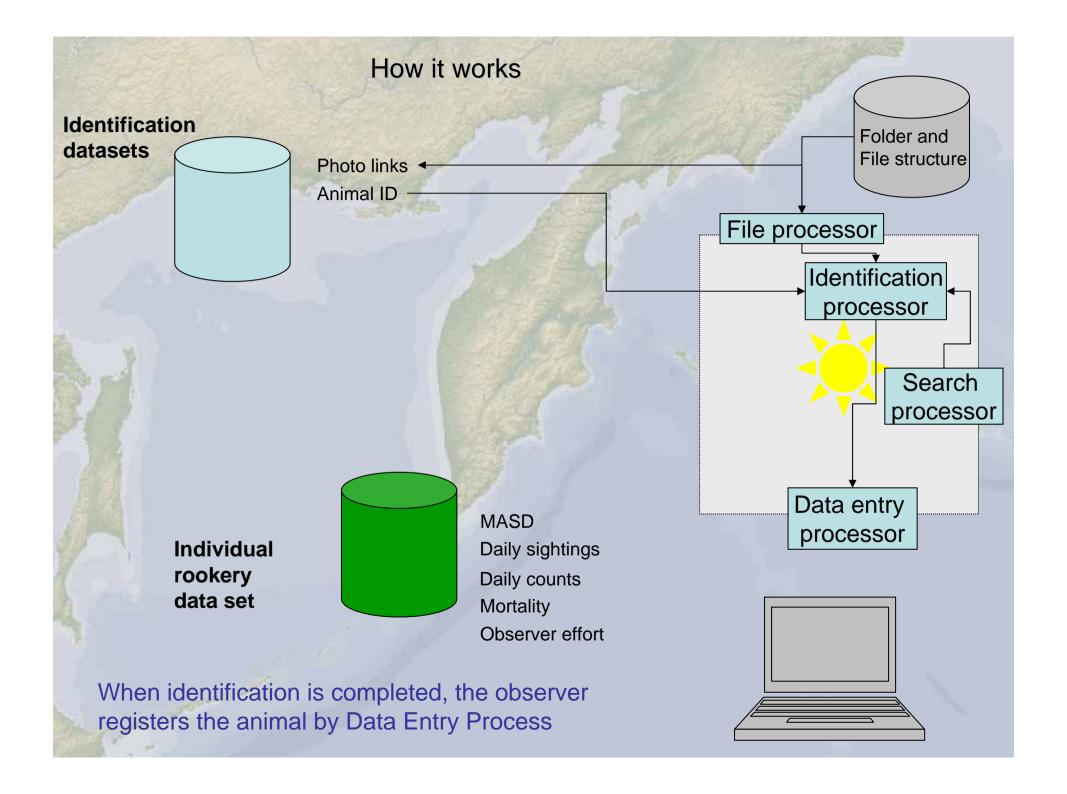




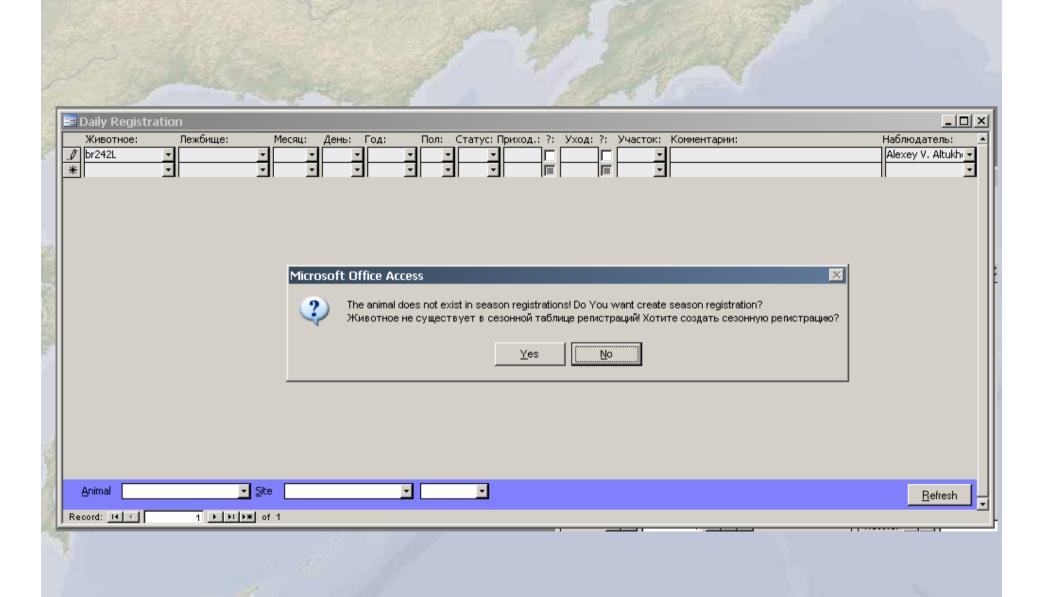


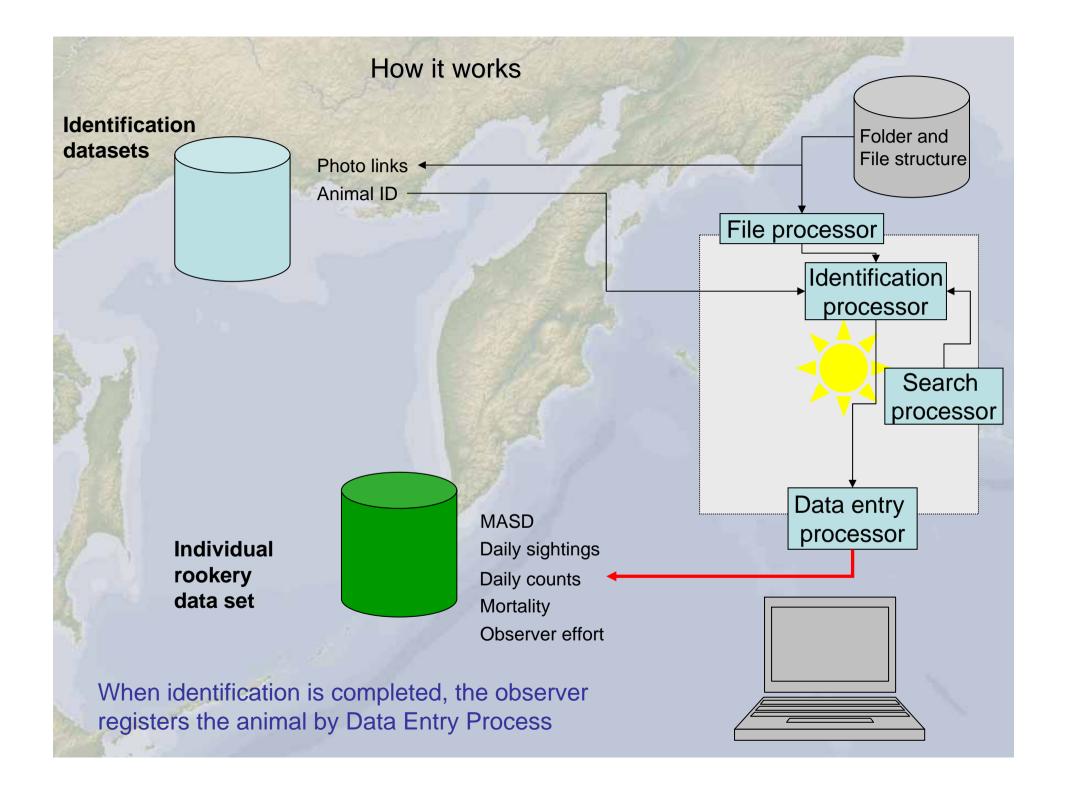


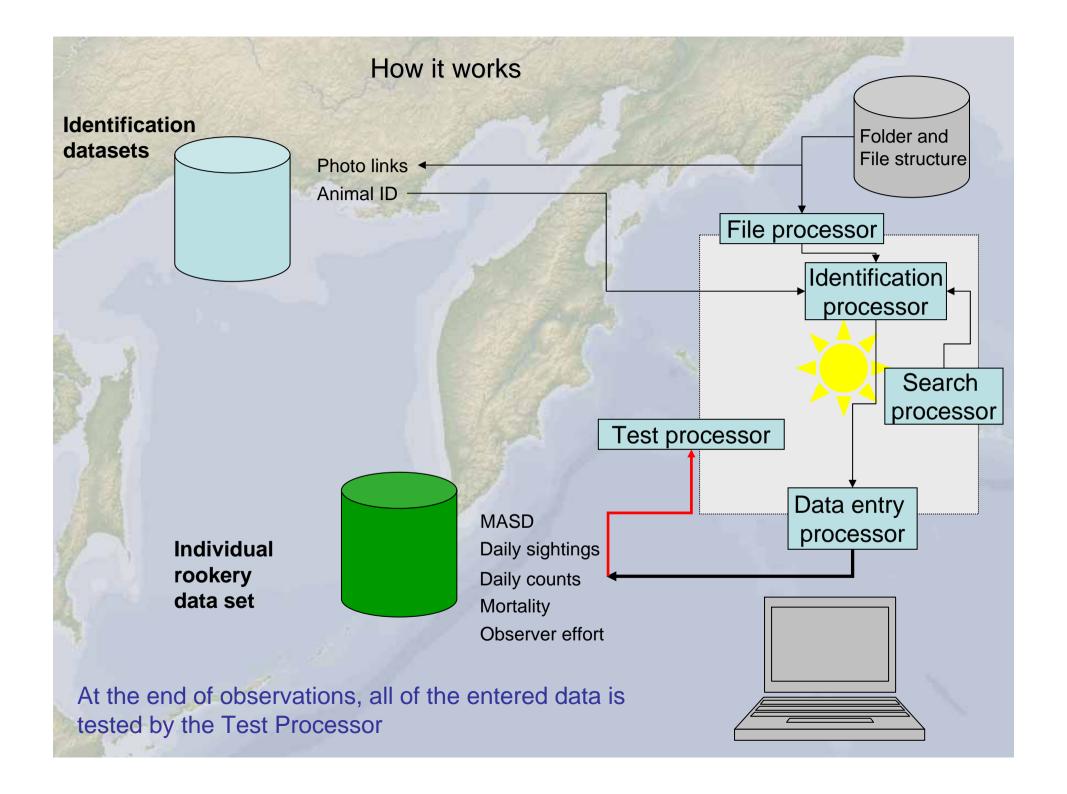




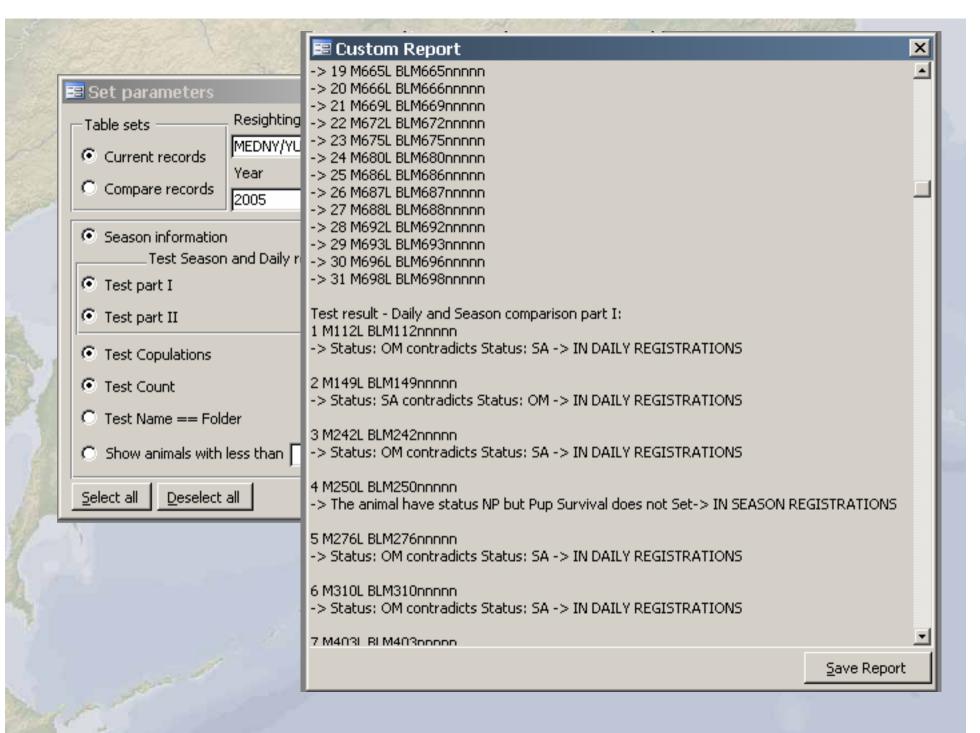


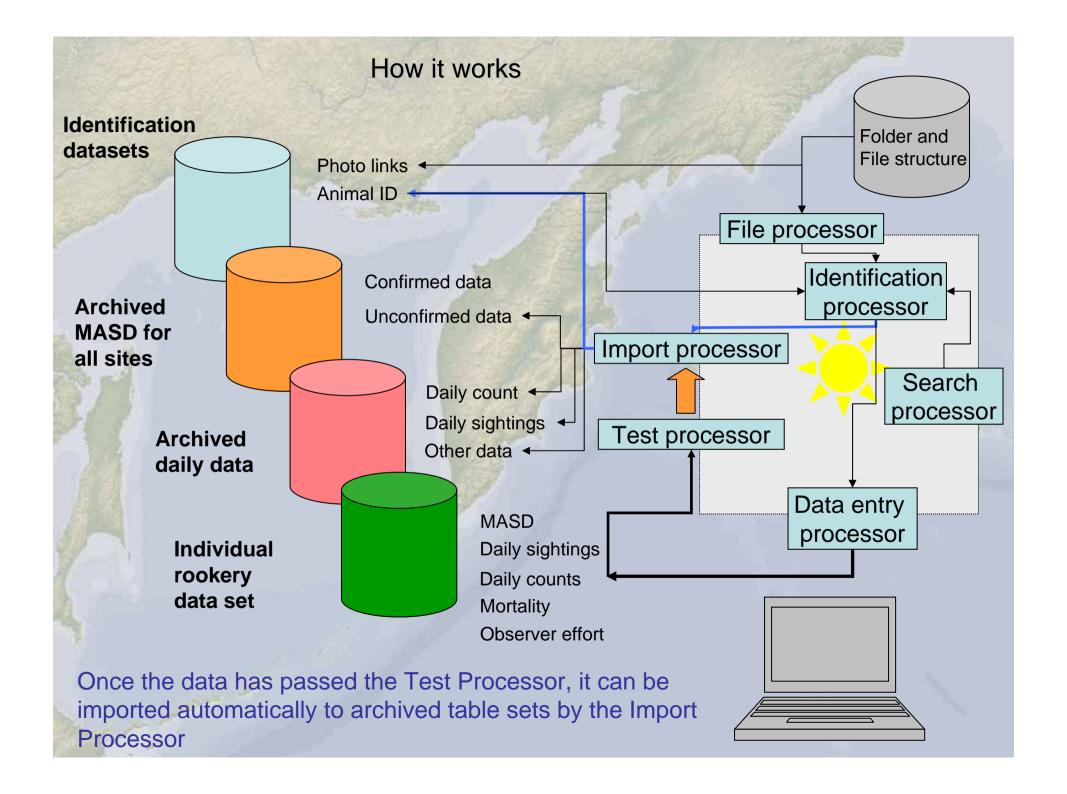


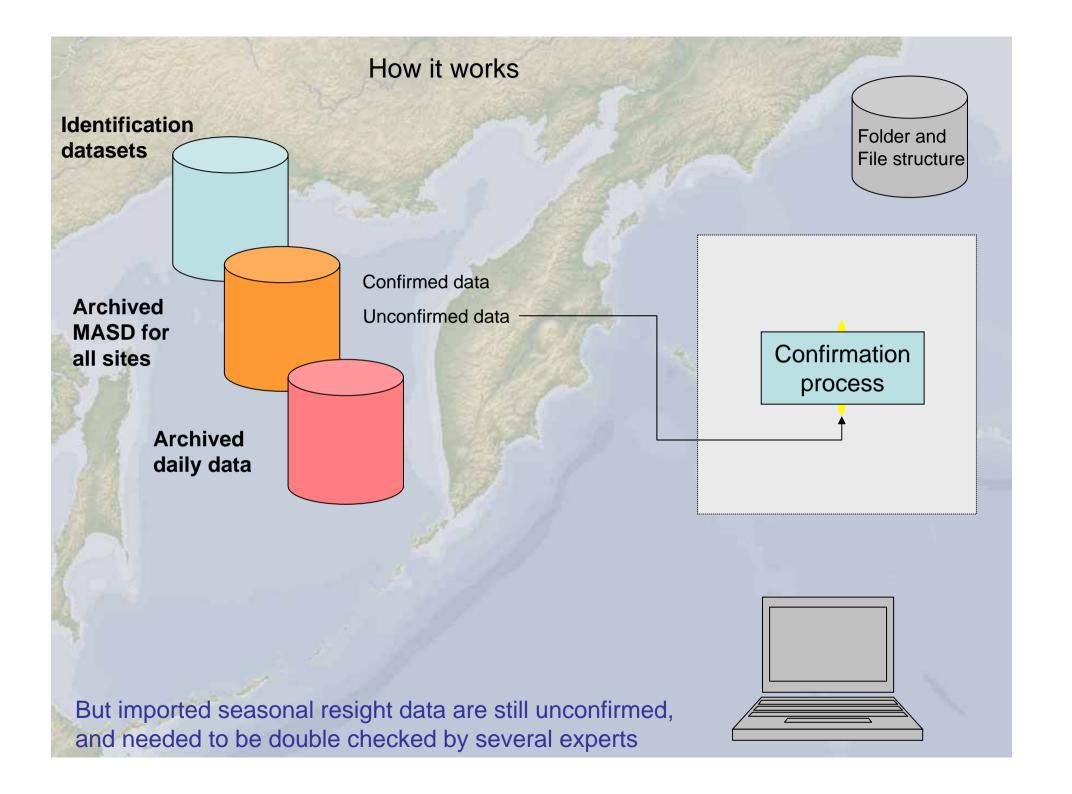


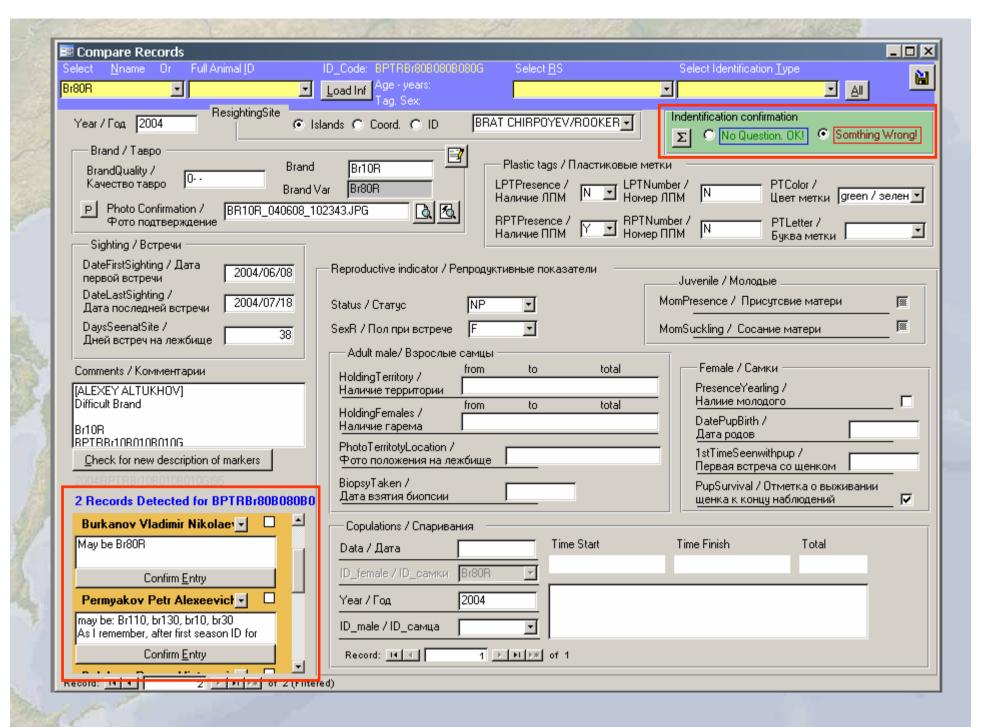


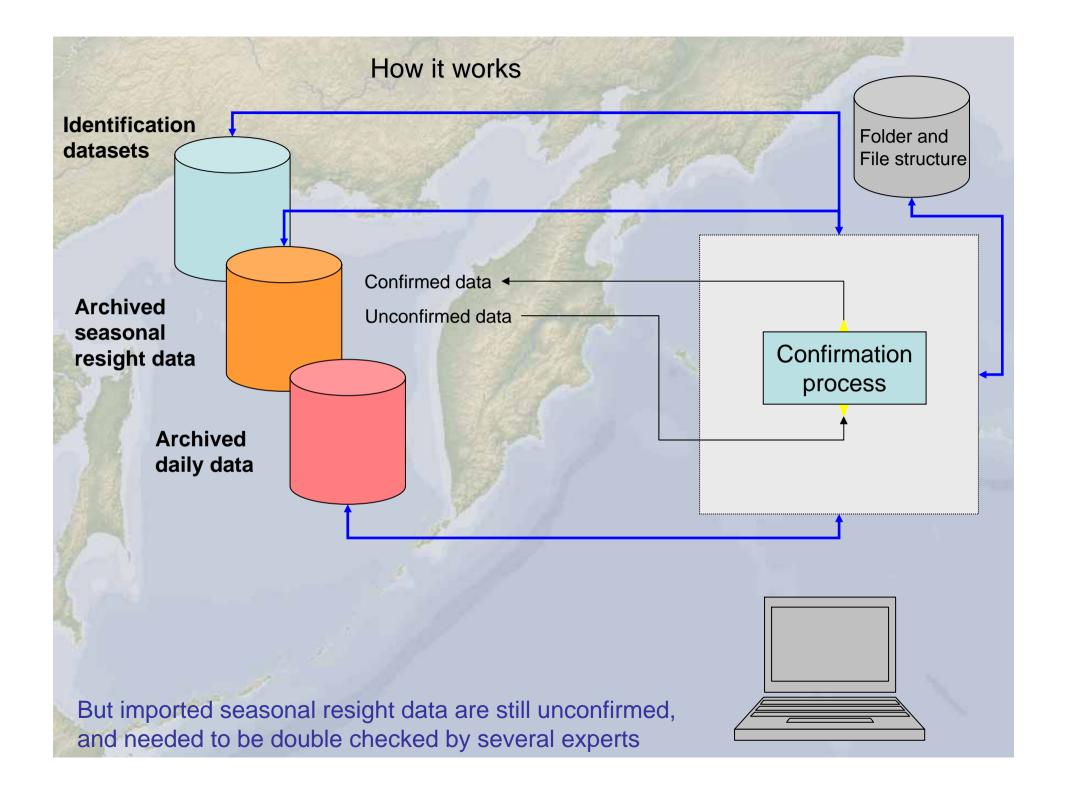
| ■ Daily Report   | x           |
|--|-------------|
| Generated report at 8/19/2005 Rookery: MEDNY/YUGO-VOSTOCHNYI   |             |
| Date: 8/19/2005<br>Count +1: 514 Dead: 2   |             |
| Count PUP: 134 Dead: 19  |             |
| All TAGGED: 101 Confirmed: 101 (Females: 43; Males: 27; Unknown: 31) Seen Per Day: 53 Include 25 females     |             |
| All INJURED: 4 Confirmed: 4 (Females: 2; Males: 2; Unknown: 0)<br>Seen Per Day: 0 Include 0 females          |             |
| All NATURALLY MARKED: 0 Confirmed: 0 (Females: 0; Males: 0; Unknown: 0)<br>Seen Per Day: 0 Include 0 females |             |
| NUMBER of registered copulations: 22<br>Males: 3 Females:20  |             |
| List of Tagged Animals with NO Photoconfirmation:  |             |
| List of INJURED Animals with NO Photoconfirmation:   |             |
| List of Naturally Marked Animals with NO Photoconfirmation:  |             |
| Plastic Tags NOT checked for:  |             |
| Biopsy Taken from:   |             |
|  | Save Report |











### **Database summary**

To date, we have archived all SSL data collected since 2002.

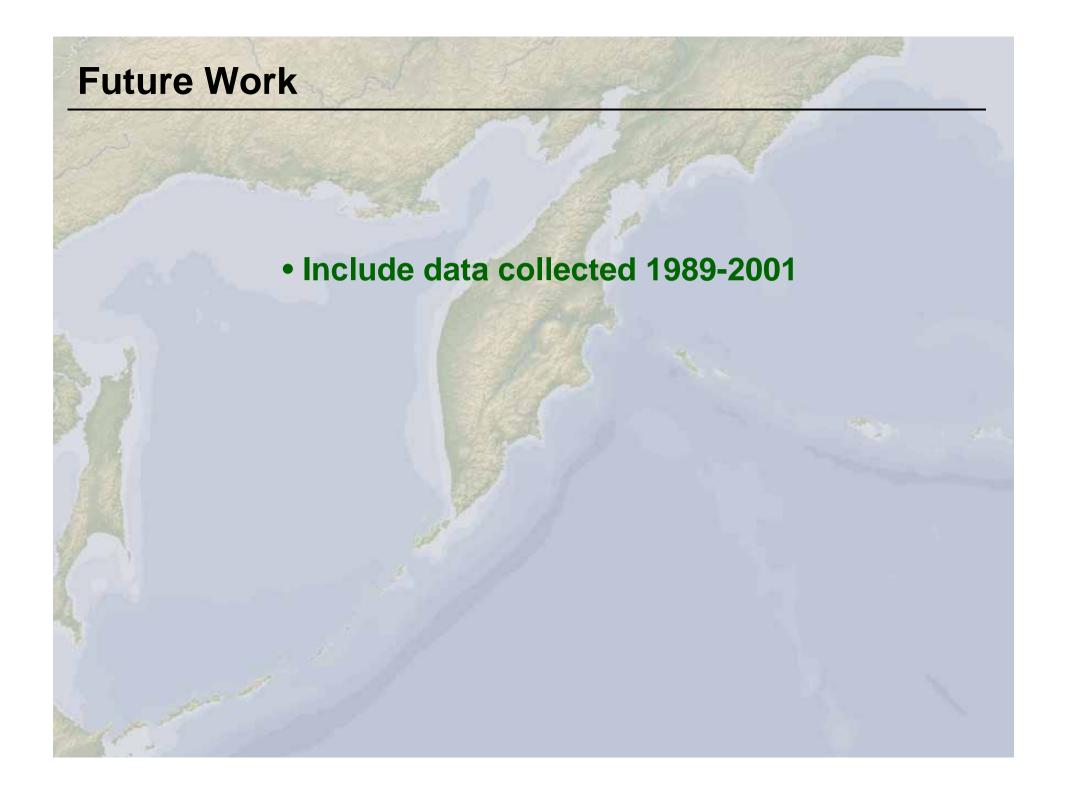
54,505 - daily resights

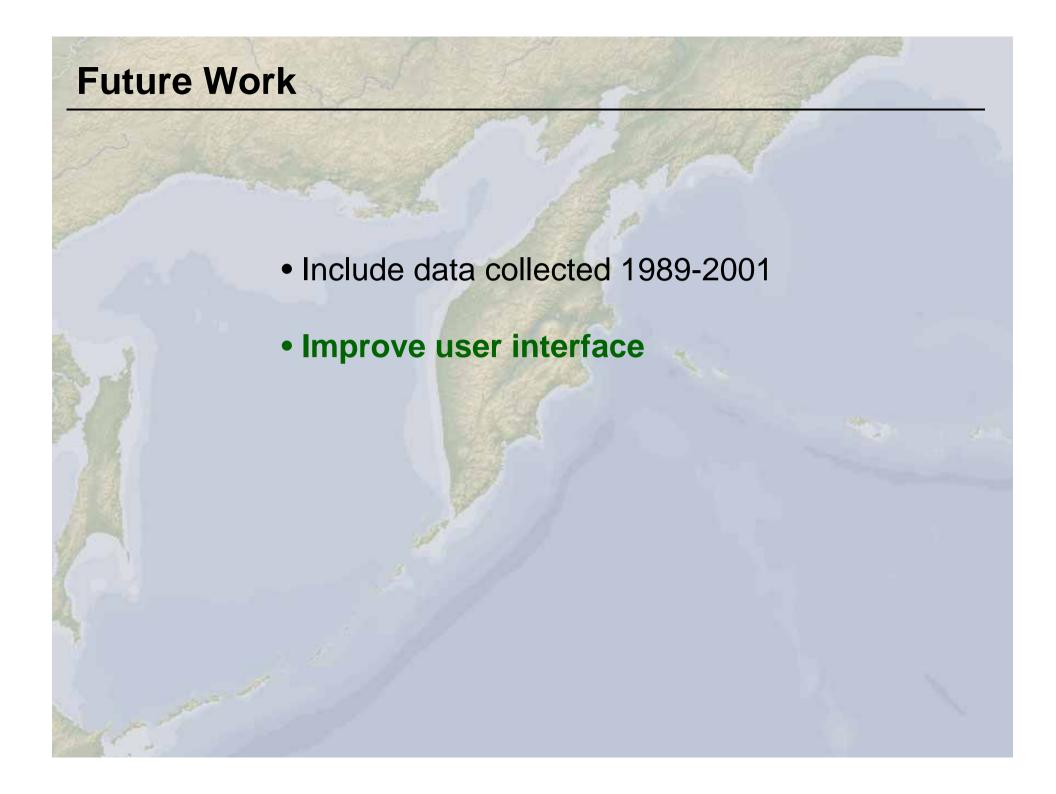
3,845 – MASD records for 1740 animals

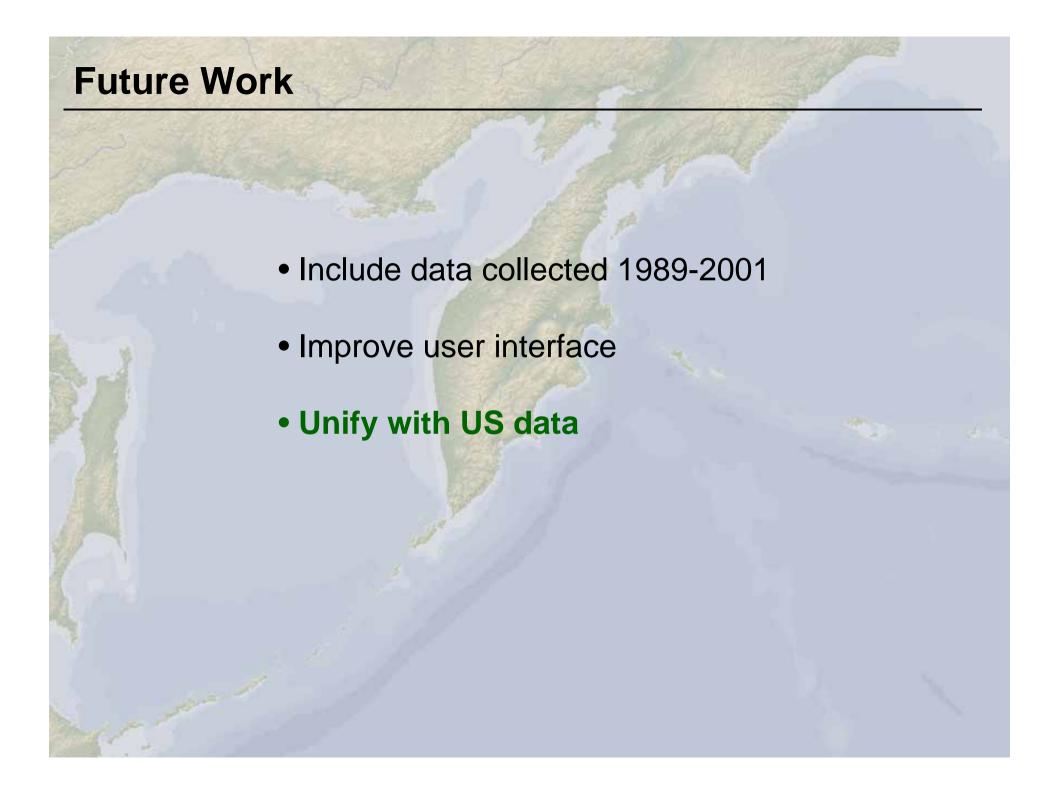
527 - copulation records

17,211 - photos of marked animal

In 2005, data in the field was entered directly into the database in Access format.







### **Future Work**

- Include data collected 1989-2001
- Improve user interface
- Unify with US data
- and finally, Analyze!

## Acknowledgements

### **Funding by**

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Alaska SeaLife Center



