

# Evaluation of Wing Fractures and Impact on Survival and Re-release

Katherine O'Neill  
March 11, 2013

# History

- Pacific Wildlife Care (PWC)
- Established: 1984
- Mission: To rehabilitate and return to their natural habitat orphaned, pollution-damaged and injured wildlife; to educate our community to value wildlife including the need to represent the environment we share with them.
- Morro Bay Facility opened Spring 2007

# Objective

- To analyze data on birds with wing fractures and establish a triage to help PWC make the most cost effective decisions for treating birds admitted to the center.

# Goals

1. Learn to train new volunteers and perform everyday operations.
2. Assist Dr. Shannon Riggs with procedures.
3. Look for trends in the relationship between wing fractures and recovery.



# Data Collection

- Collected data using Animal Care Records from 2007 to 2013\*
- WRMD
- Entered all relevant data into Excel

# Case ID: 359

Western Gull: Closed fx at radius





# Case ID: 556

Scrub Jay: Closed fx mid-diaphyseal R ulna

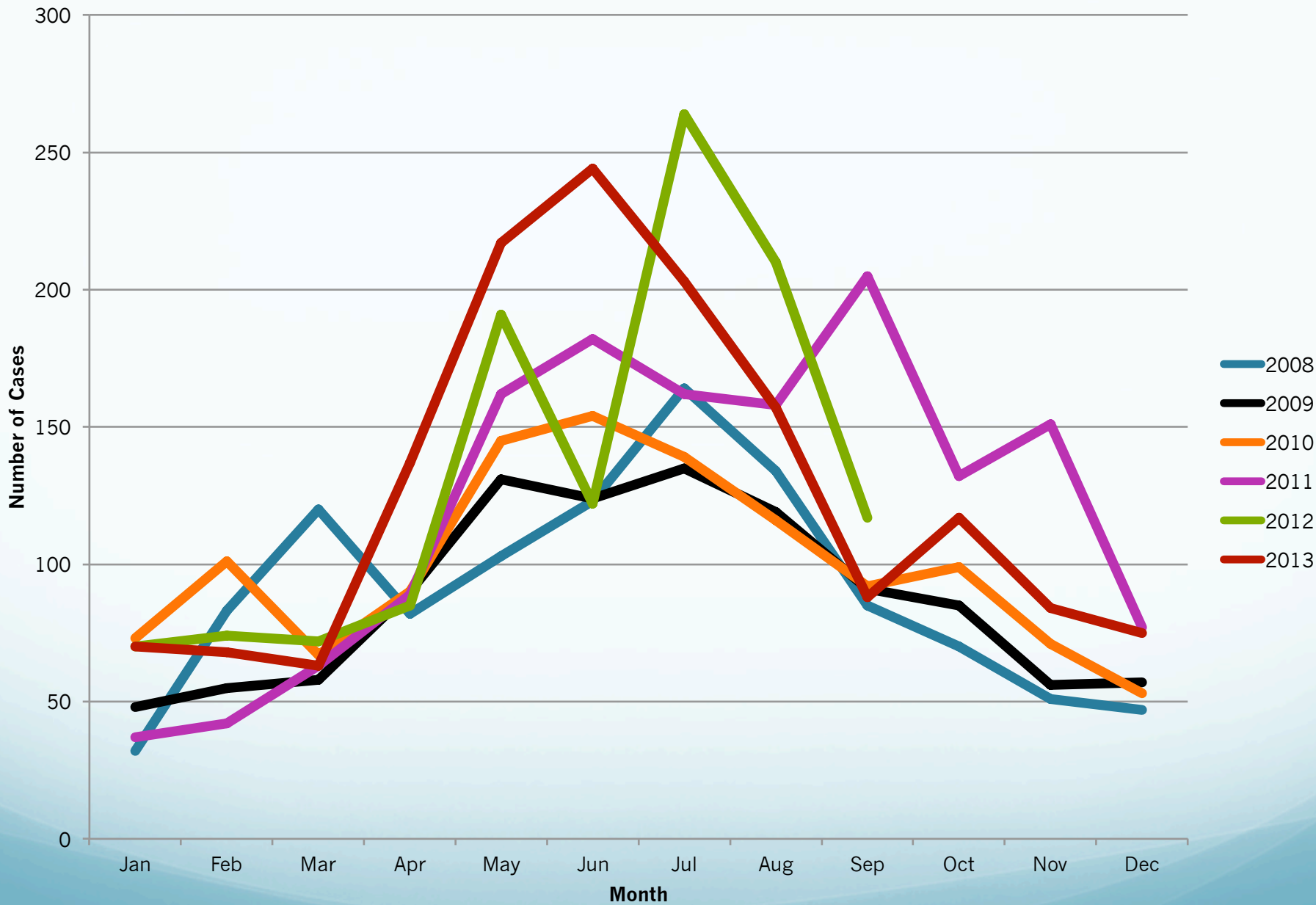


# Data

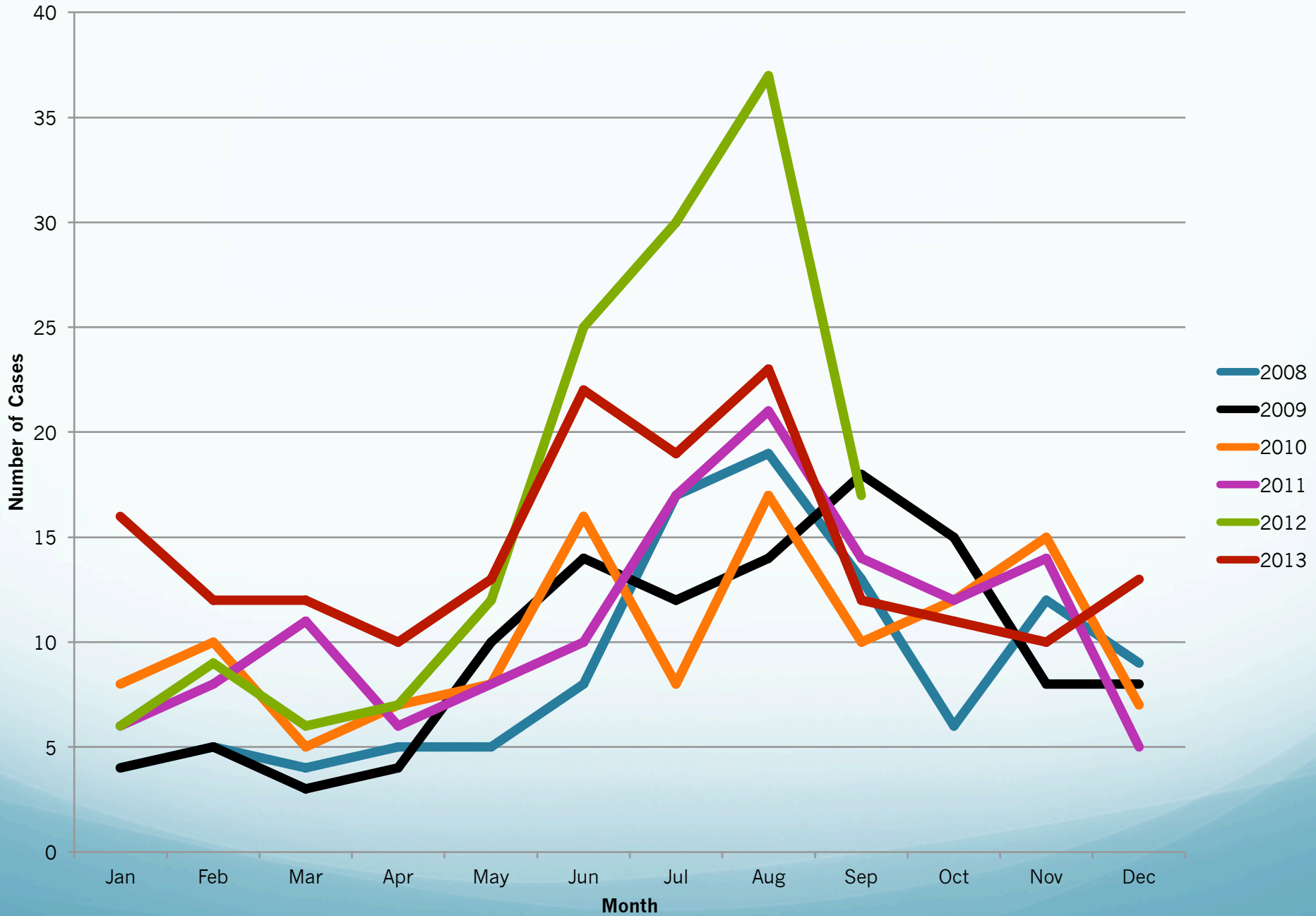
- On average :
  - 80% of cases are birds
  - 11% of bird cases are wing fractures

Year	Total Cases	Total Bird Cases	Total Non Bird Cases	Wing Fx	% Wing Fx	% Survival	% Bird Cases
2007	719	601	118	70	11.65	10.00	83.59
2008	1432	1094	338	107	9.78	5.61	76.40
2009	1336	1049	287	115	10.96	10.43	78.52
2010	1476	1200	276	123	10.25	5.69	81.30
2011	1735	1460	275	132	9.04	2.27	84.15
2012	1540	1210	330	152	12.56	5.26	78.57
					<b>10.71</b>	<b>6.54</b>	<b>80.42</b>
2013	2018	1523	495	173	11.36	16.76	75.47
					<b>11.36</b>	<b>16.76</b>	<b>75.47</b>

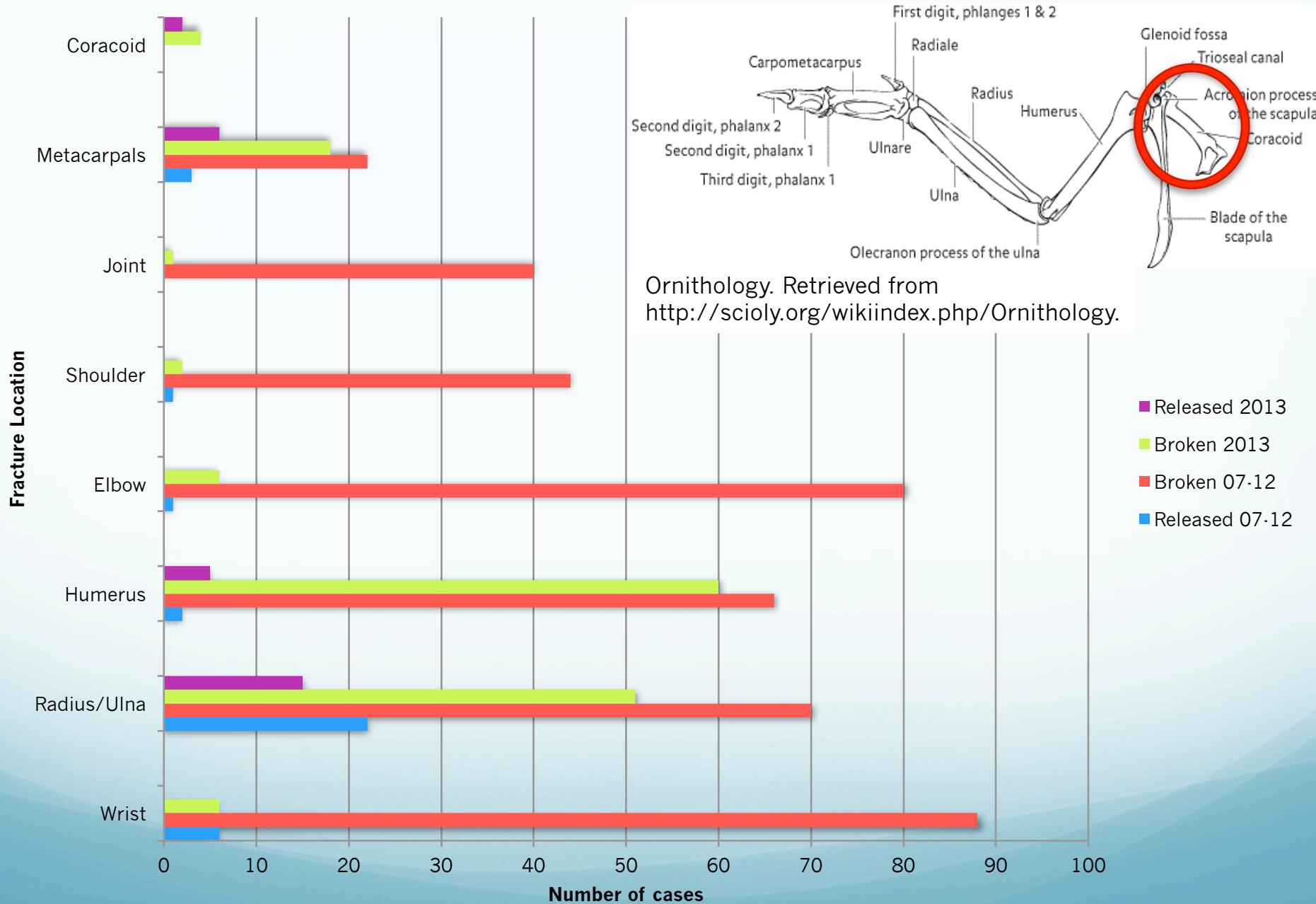
# Total Bird Cases by Month



# Wing Fx by Month

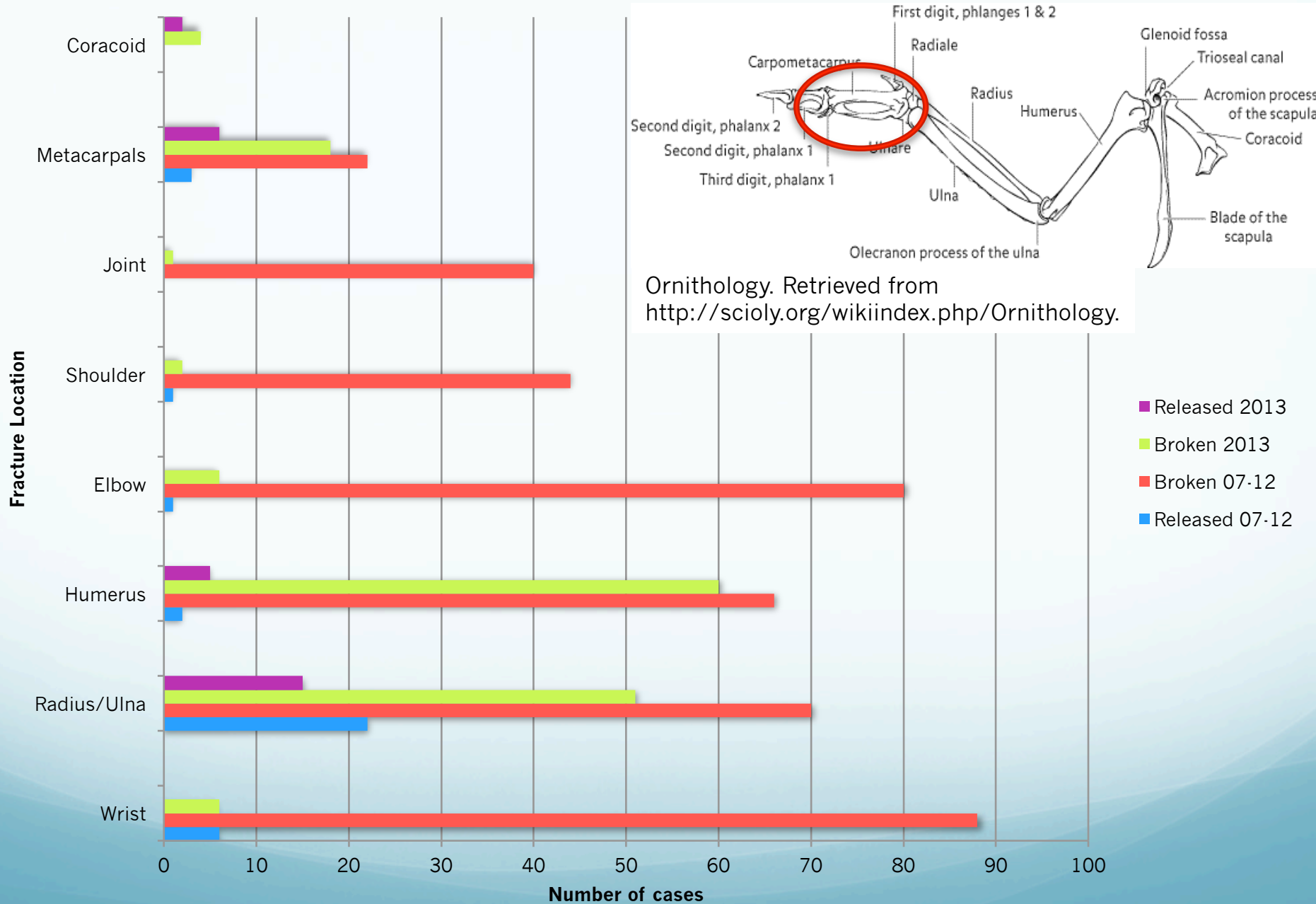


# Number Released by Fracture Location



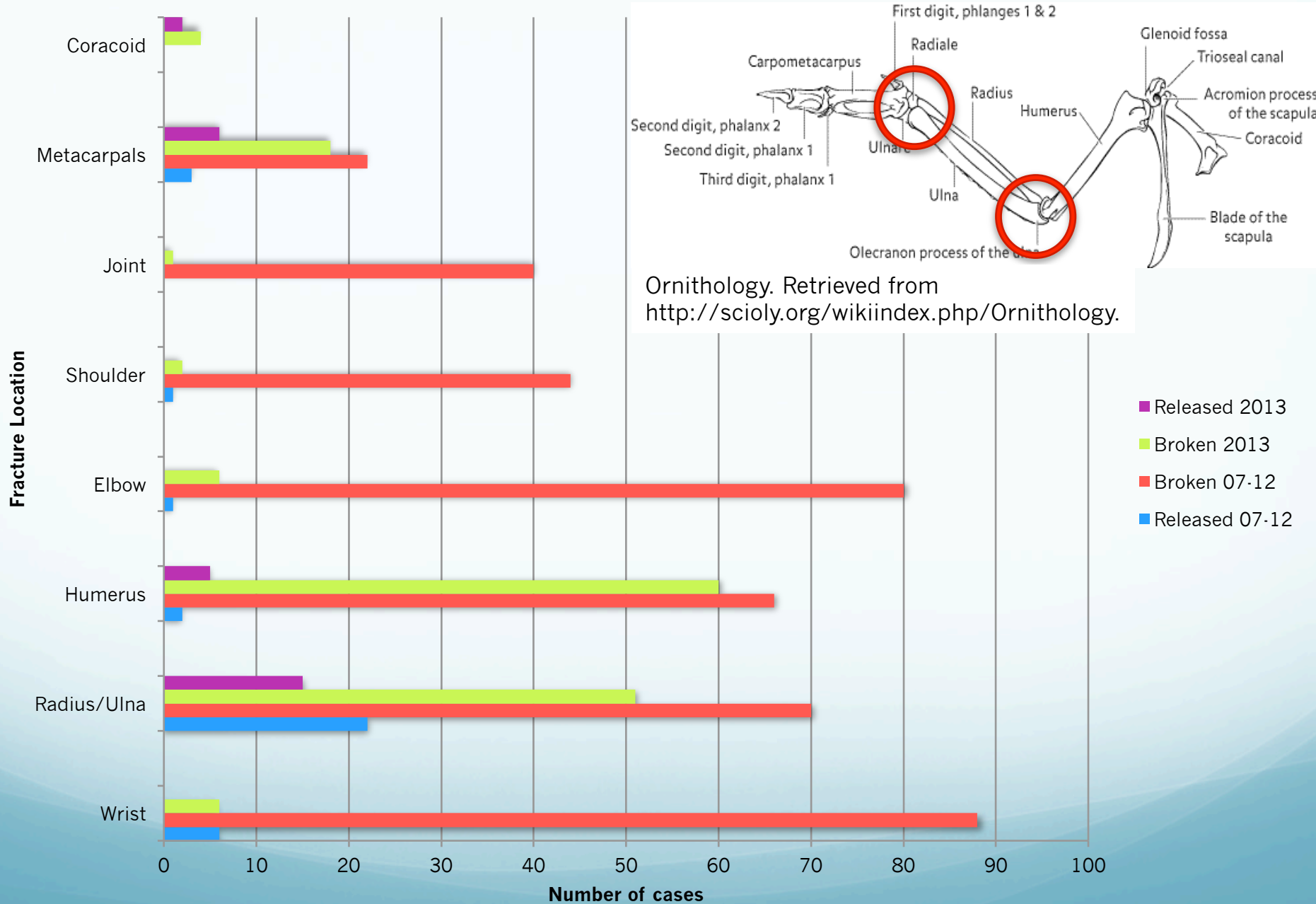


# Number Released by Fracture Location

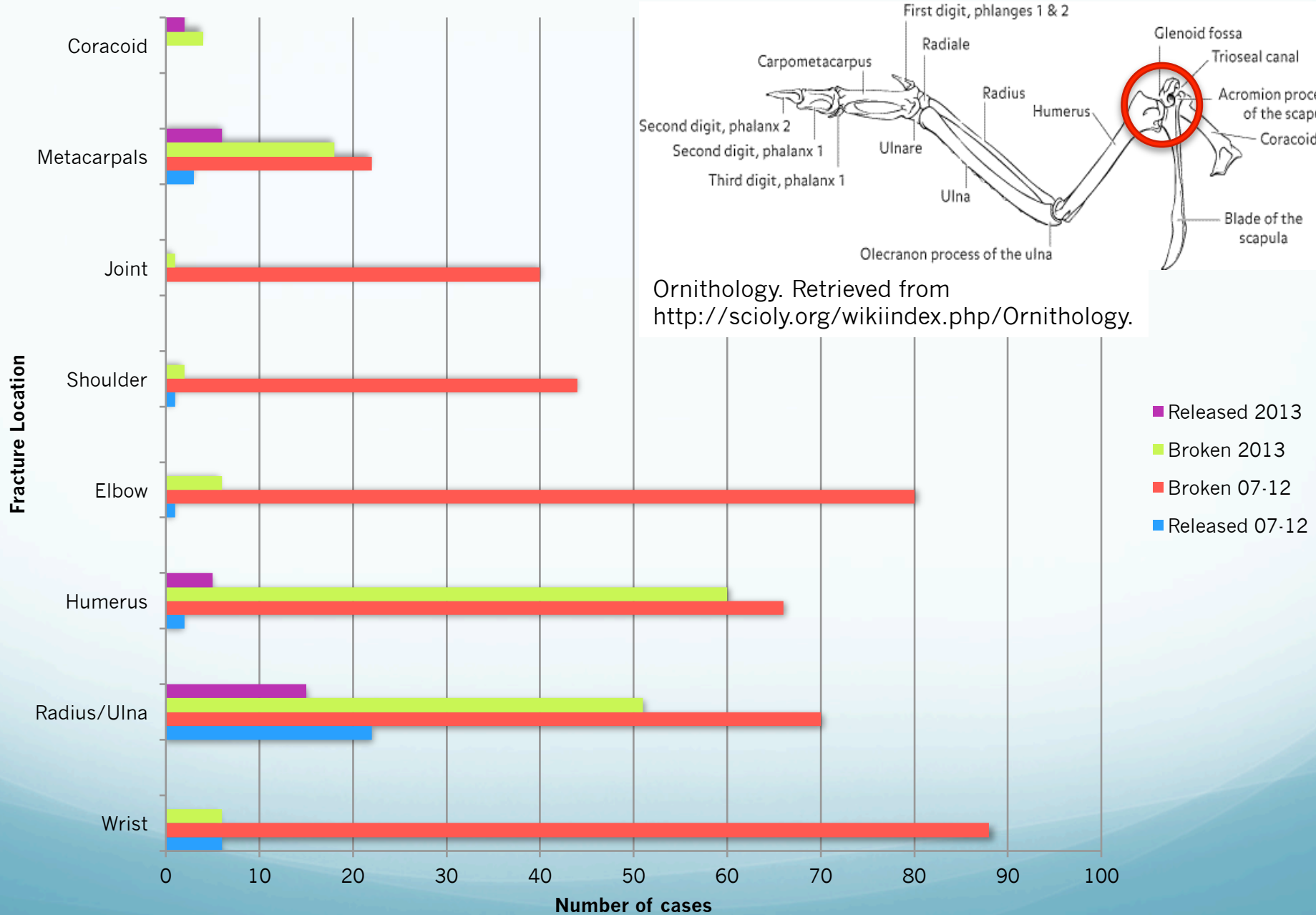




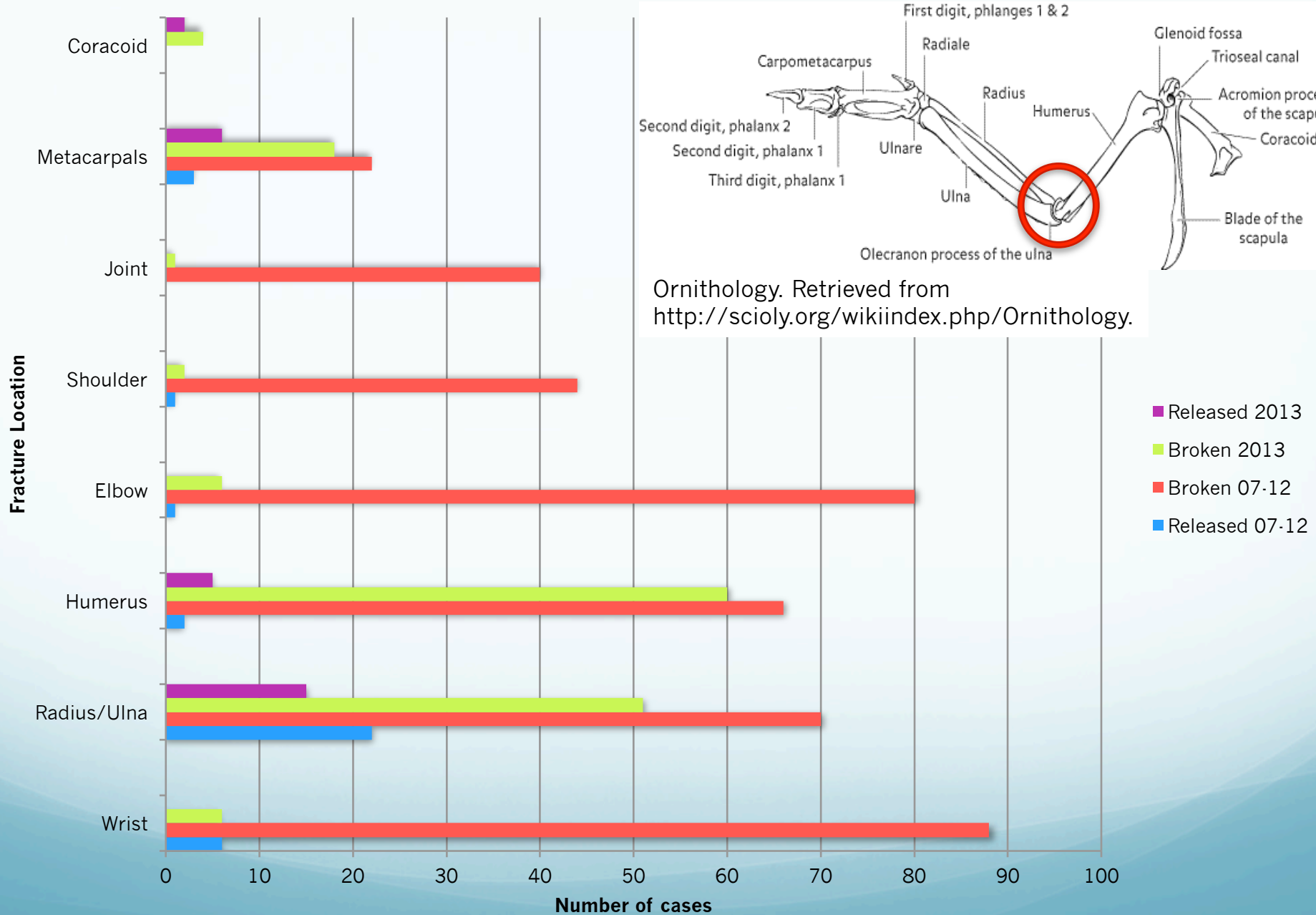
# Number Released by Fracture Location



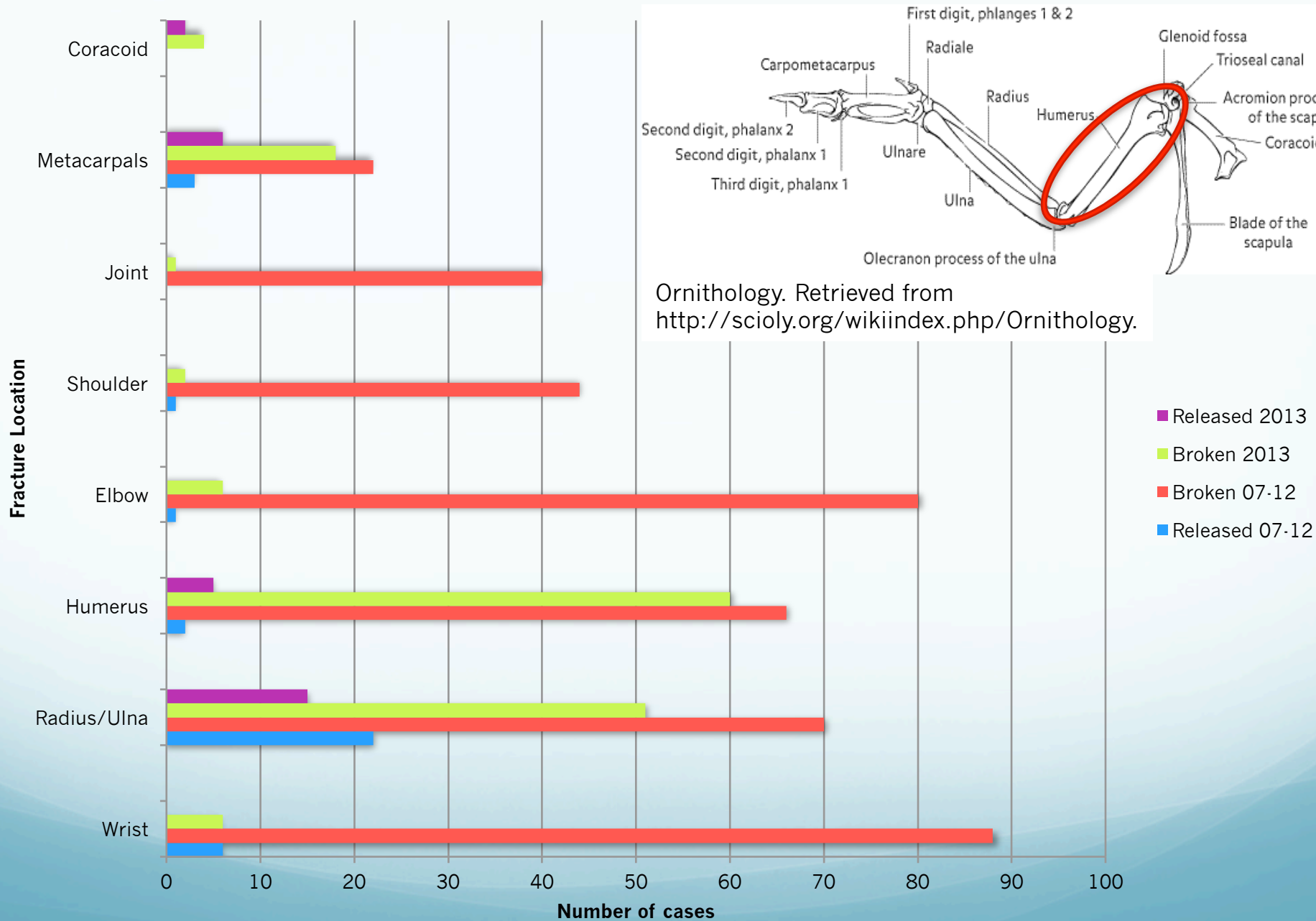
# Number Released by Fracture Location



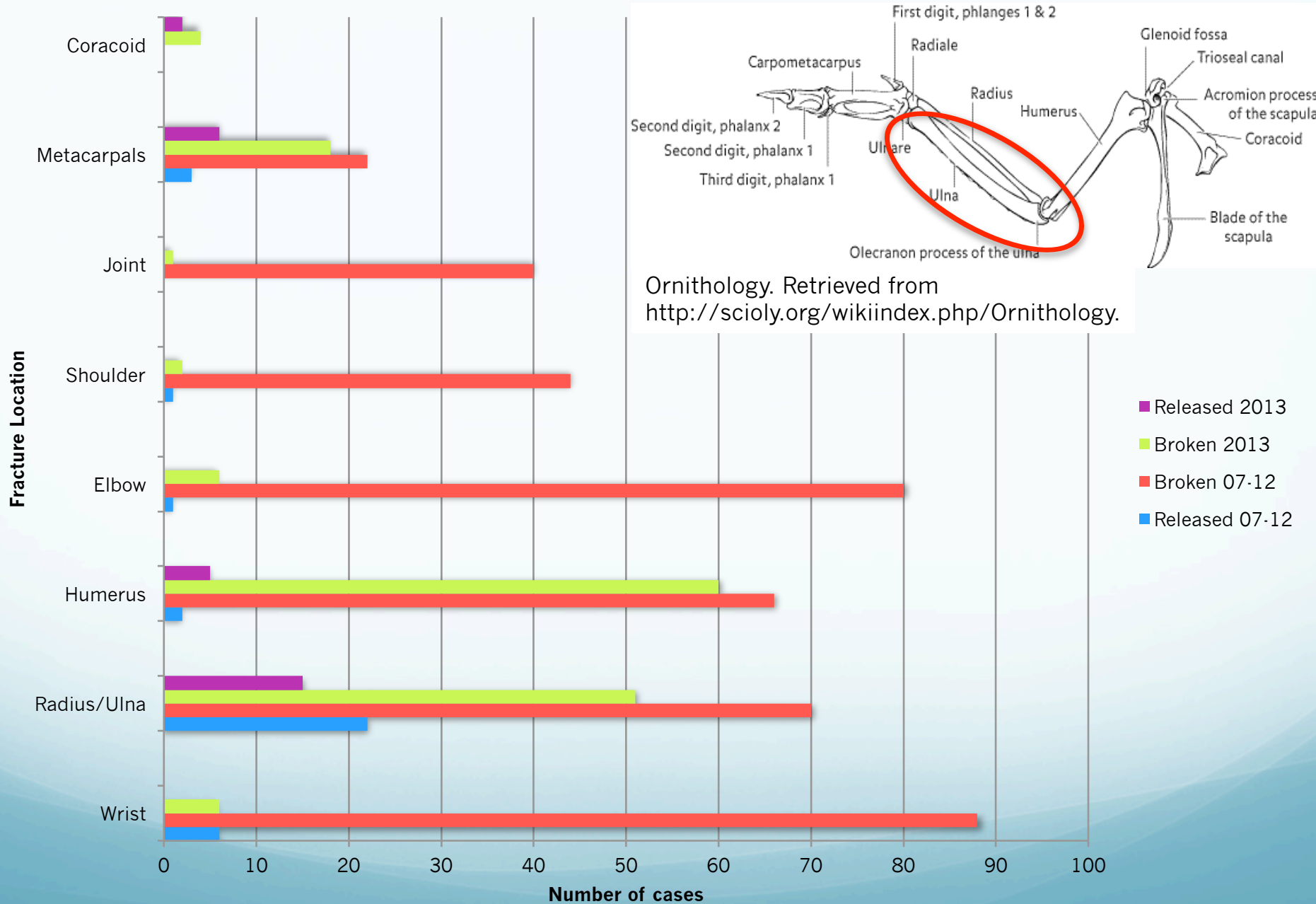
# Number Released by Fracture Location



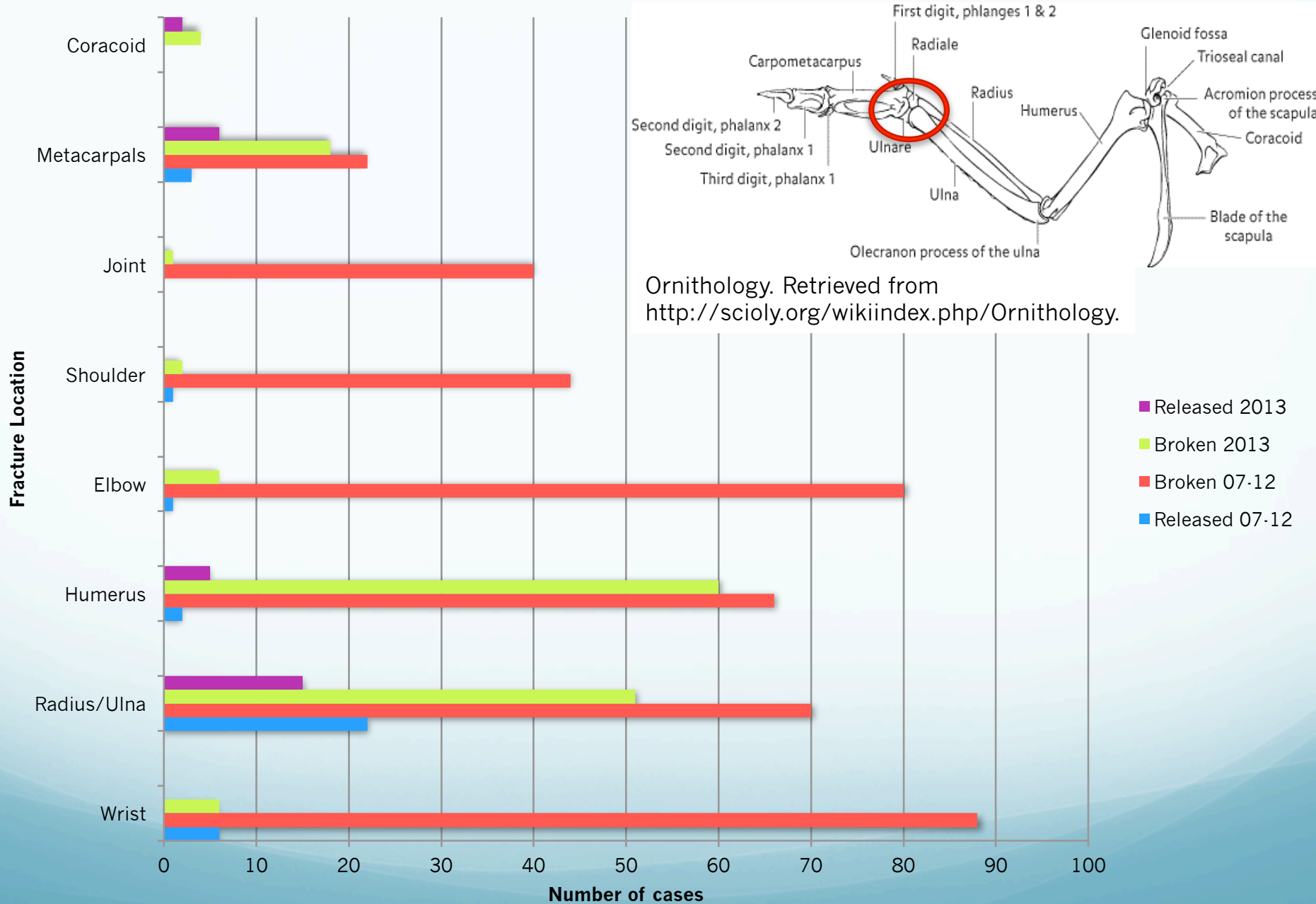
# Number Released by Fracture Location



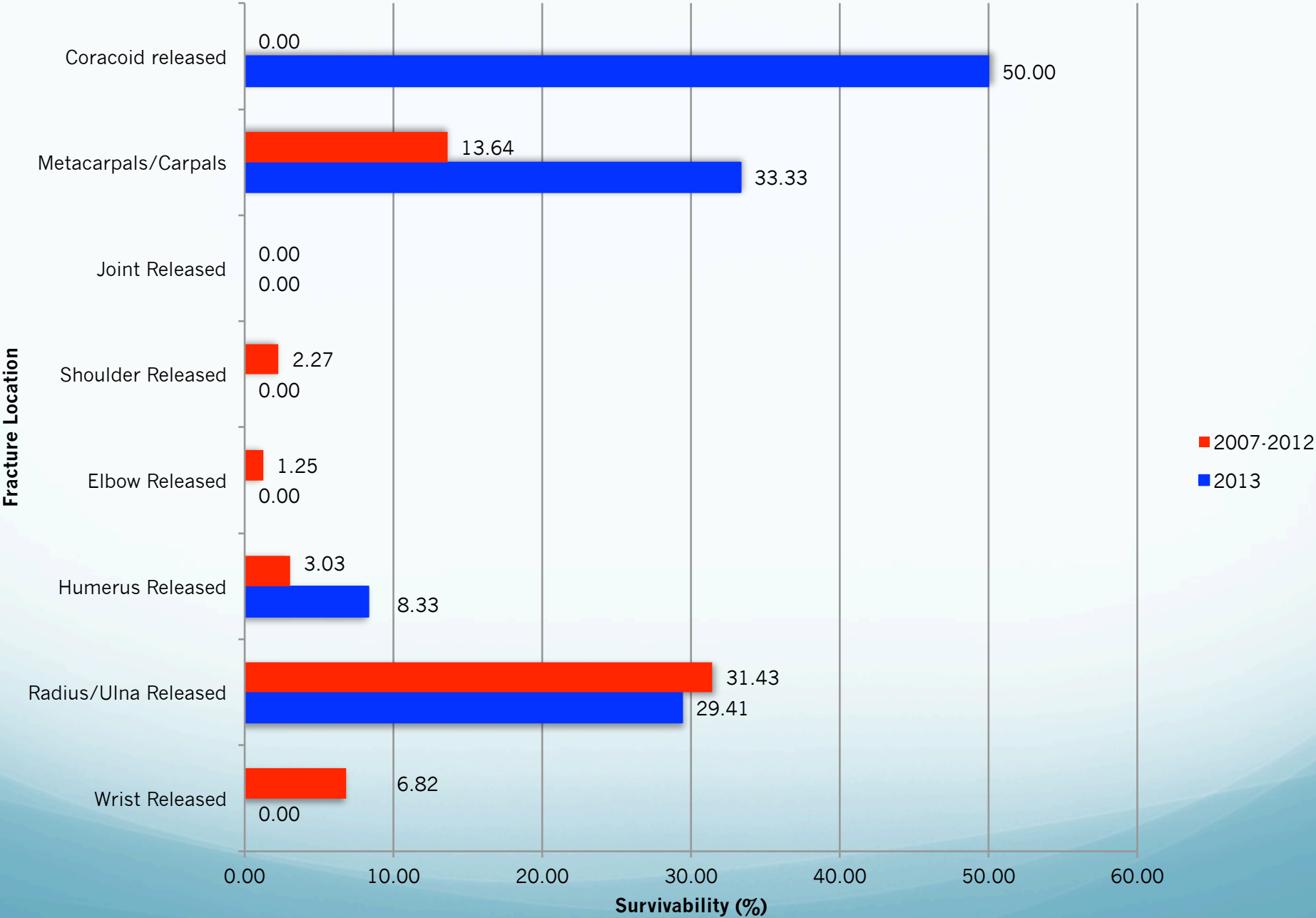
# Number Released by Fracture Location

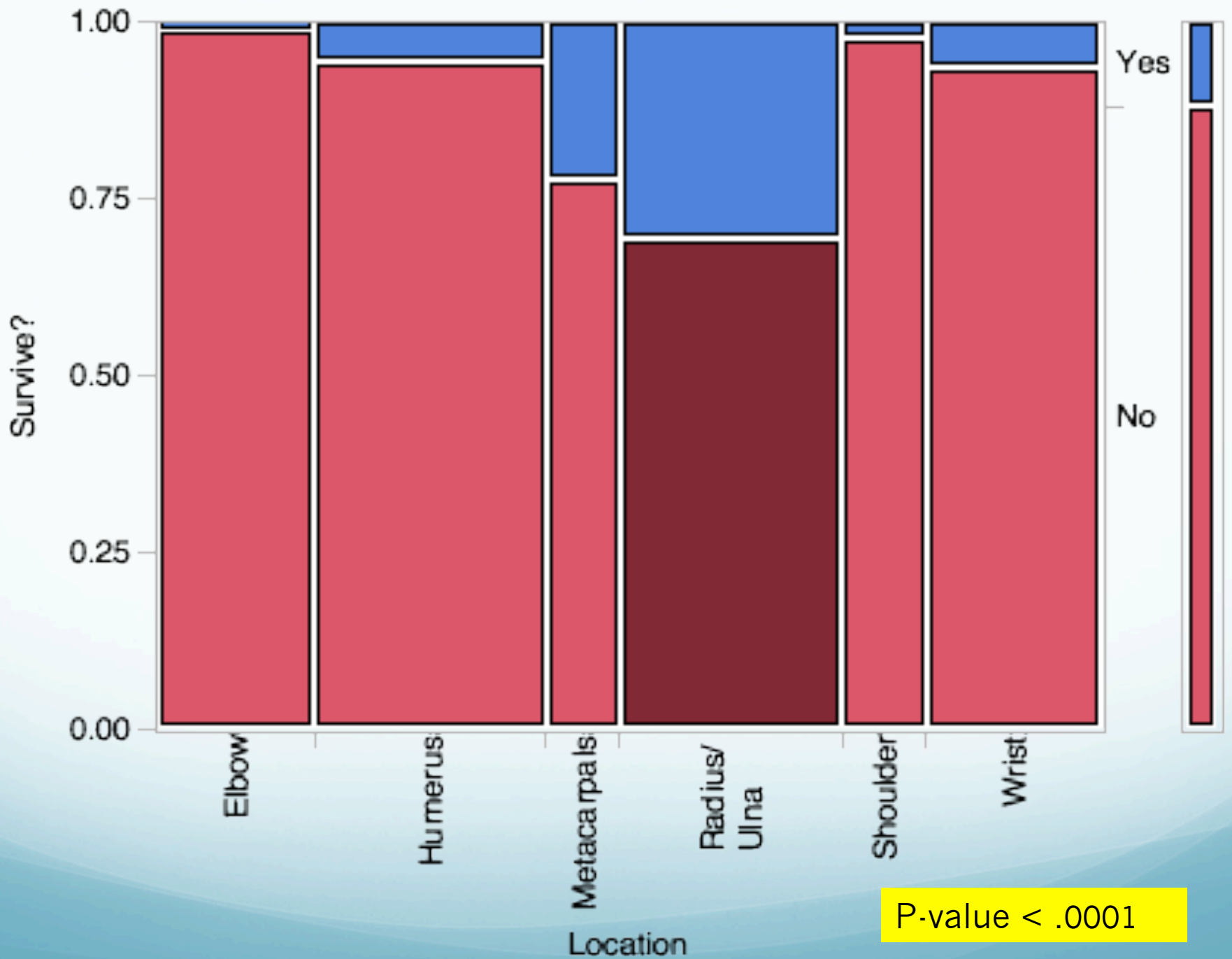


# Number Released by Fracture Location



# Percent Survivability



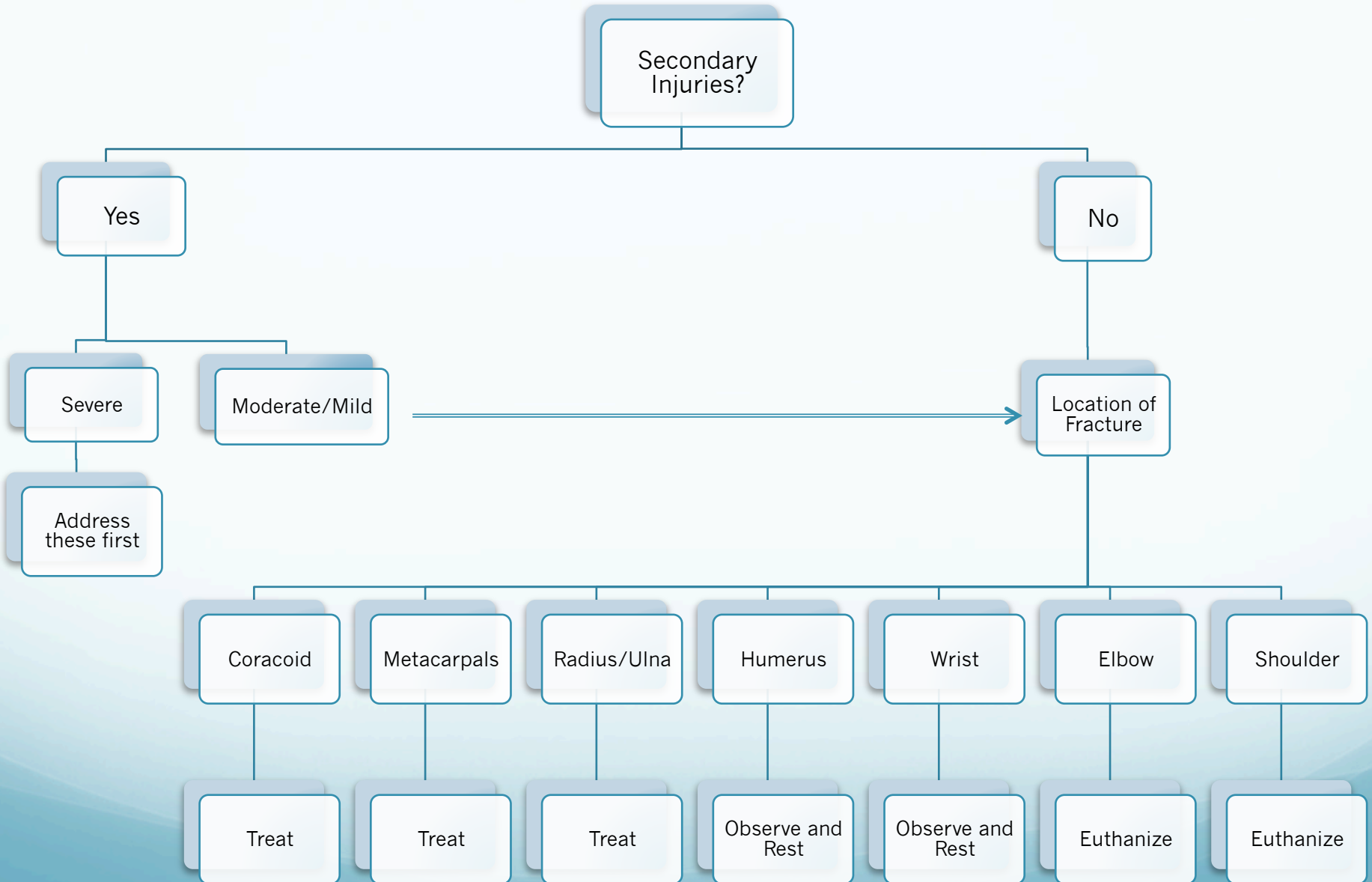




# Triage

- Cost to treat- \$250 – 300.
  - Variable by amount of time spent at the center
  - Additional injuries
  - Medications

# Triage



# Considerations

- I would like to thank Pacific Wildlife Care
- Dr. Plummer and the Animal Science Department
- Dr. Kevin Ross

# Works Consulted

1. Ornithology. Retrieved from <http://scioly.org/wiki/index.php/Ornithology>.
2. Fowler, A. "Fractures in Birds." Web 7 Mar. 2014.  
<[http:// www.ozarkwild.org/fracturebirds.php](http://www.ozarkwild.org/fracturebirds.php)>

# Questions?

