

Lake Mohave PIT Scanning Summary

2016 NFWG Mid-Year Meeting

Table 1. Repatriate population estimates based on PIT scanning for River and Basin zones of Lake Mohave, including marking (M), census (C), and recapture records (R) as well as confidence intervals for each estimate.

Year	Zone	M	C	R	Pop Estimate	Lower CI	Upper CI
2010	Basin	209	179	53	700	538	911
2011	River	336	1,213	220	1,851	1,623	2,111
	Basin	171	677	122	948	795	1,130
2012	River	289	1,532	204	2,169	1,892	2,486
	Basin	277	1,221	224	1,510	1,325	1,720
2013	River	543	1,373	363	2,053	1,853	2,275
	Basin	564	1,130	427	1,493	1,358	1,641
2014	River	615	1,505	449	2,062	1,880	2,261
	Basin	531	1,314	376	1,856	1,678	2,052
2015	River	593	1,387	395	2,082	1,887	2,297
	Basin	455	1,627	382	1,938	1,754	2,142

Table 2. Razorback sucker contacted by remote PIT scanning in 2016 that were also contacted in 2015 broken down by zone of contact in Lake Mohave. Fish contacted in more than one zone in the same year were excluded from analysis.

2015	2016		
	River	Liberty	Basin
River	806	0	40
Liberty	0	0	0
Basin	31	0	751

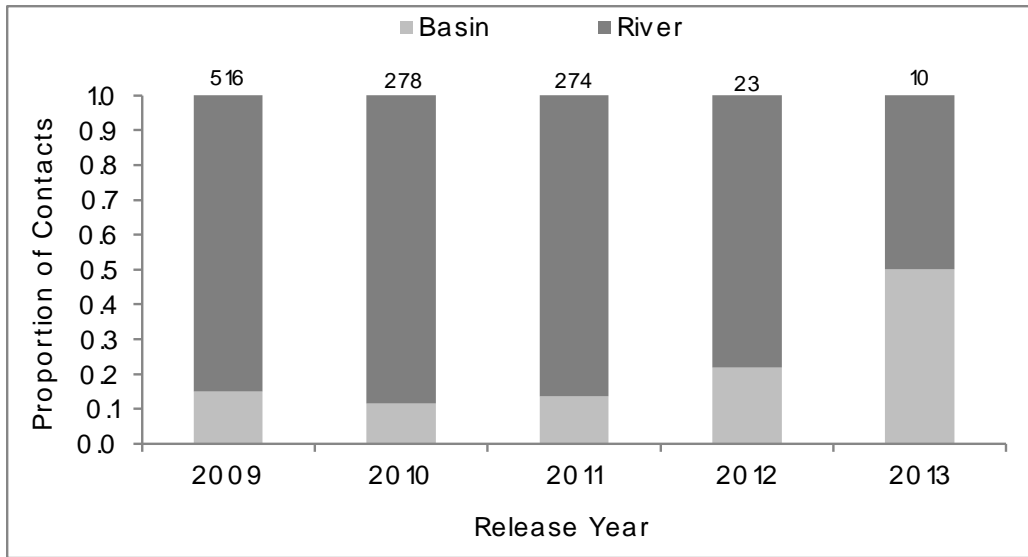


Figure 1. Proportion of razorback sucker PIT tag contacts in 2016 among scanning zones in Lake Mohave: Basin (light gray) and River (dark gray), for fish released in River. Total number of fish scanned from a given release year is indicated at the top of each column. Fish were released between October 1, 2008 and September 30, 2014 and contacted during PIT scanning activities from October 1, 2015 and September 30, 2016.

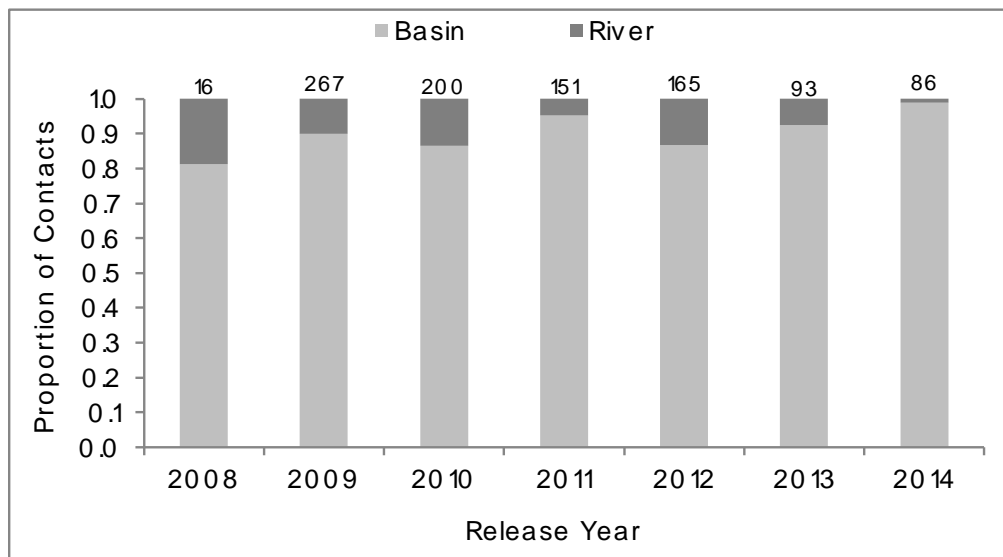


Figure 2. Proportion of razorback sucker PIT tag contacts in 2016 among scanning zones in Lake Mohave: Basin (light gray) and River (dark gray), for fish released in Basin. Total number of fish scanned from a given release year is indicated at the top of each column. Fish were released between October 1, 2008 and September 30, 2014 and contacted during PIT scanning activities from October 1, 2015 and September 30, 2016.

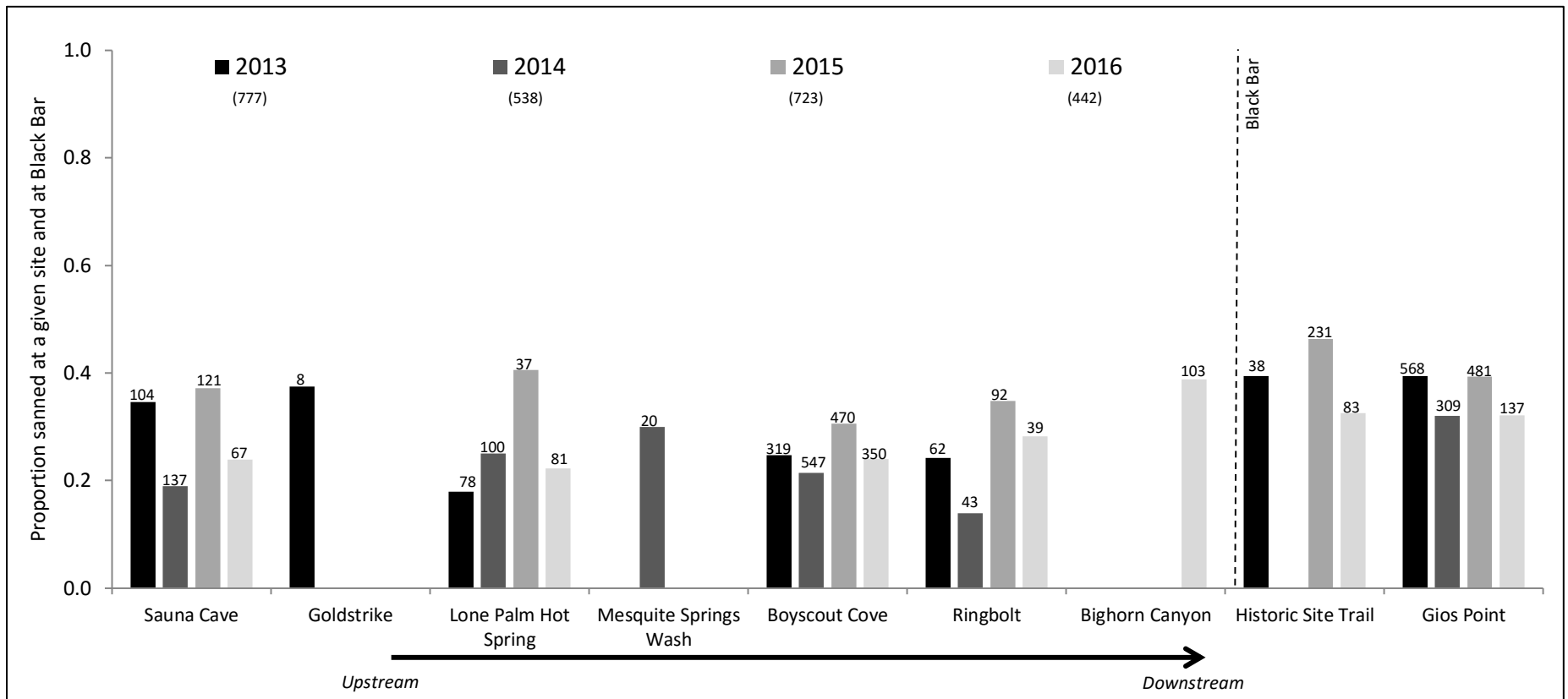


Figure 3. Proportion of fish scanned at a given location as well as scanned at Black Bar from 2013 – 2016. Data labels indicate total number of fish scanned at a given site each year. Total number of fish scanned at Black Bar each year is in parentheses.

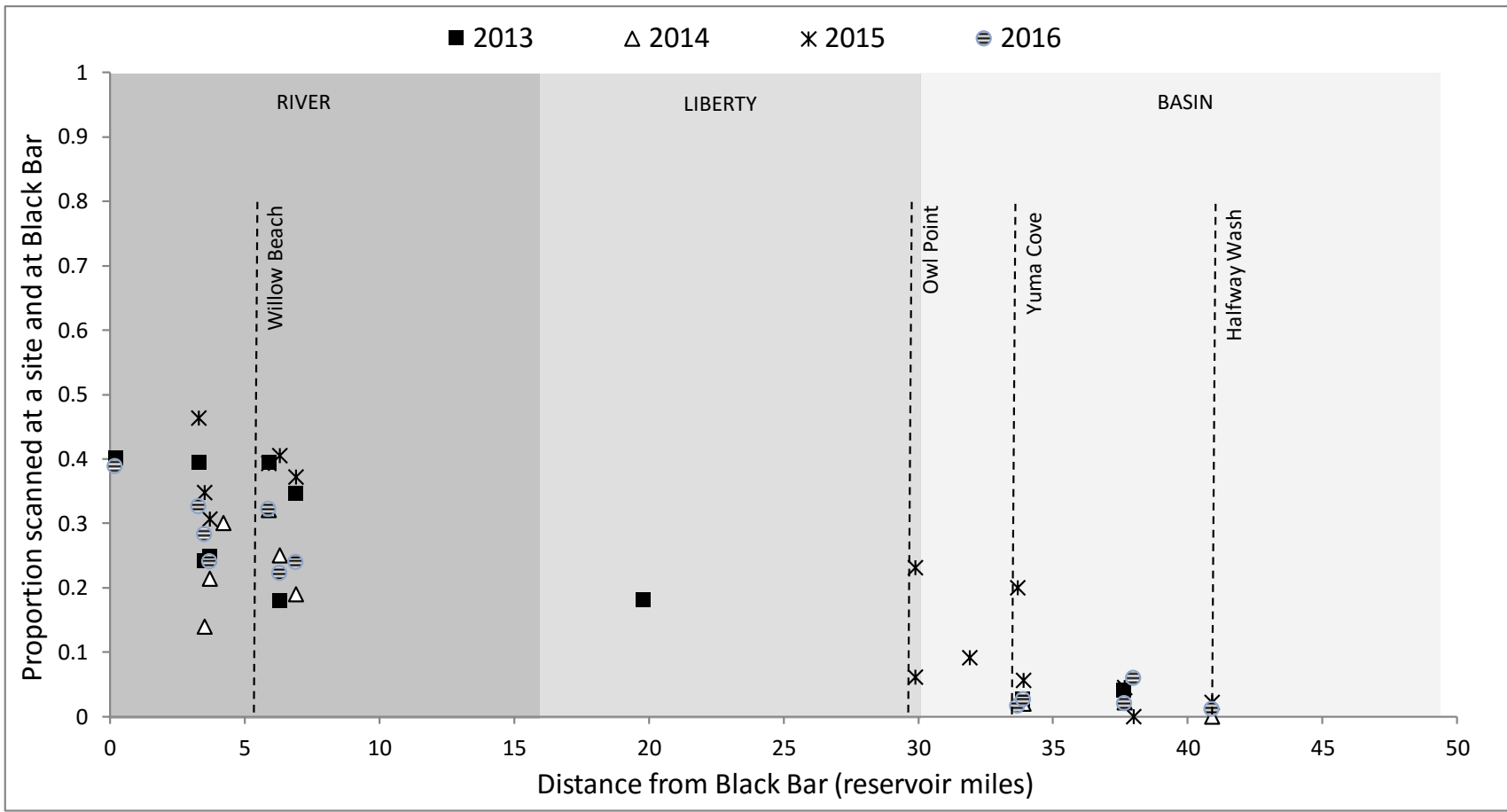


Figure 4. Proportion of fish scanned at a given location as well as scanned at Black Bar from 2013 to 2016. Shaded regions distinguishing Lake Mohave scanning zones and dashed lines indicating locations are given for reference. Excluded proportions where total fish scanned at a given site was less than 10.

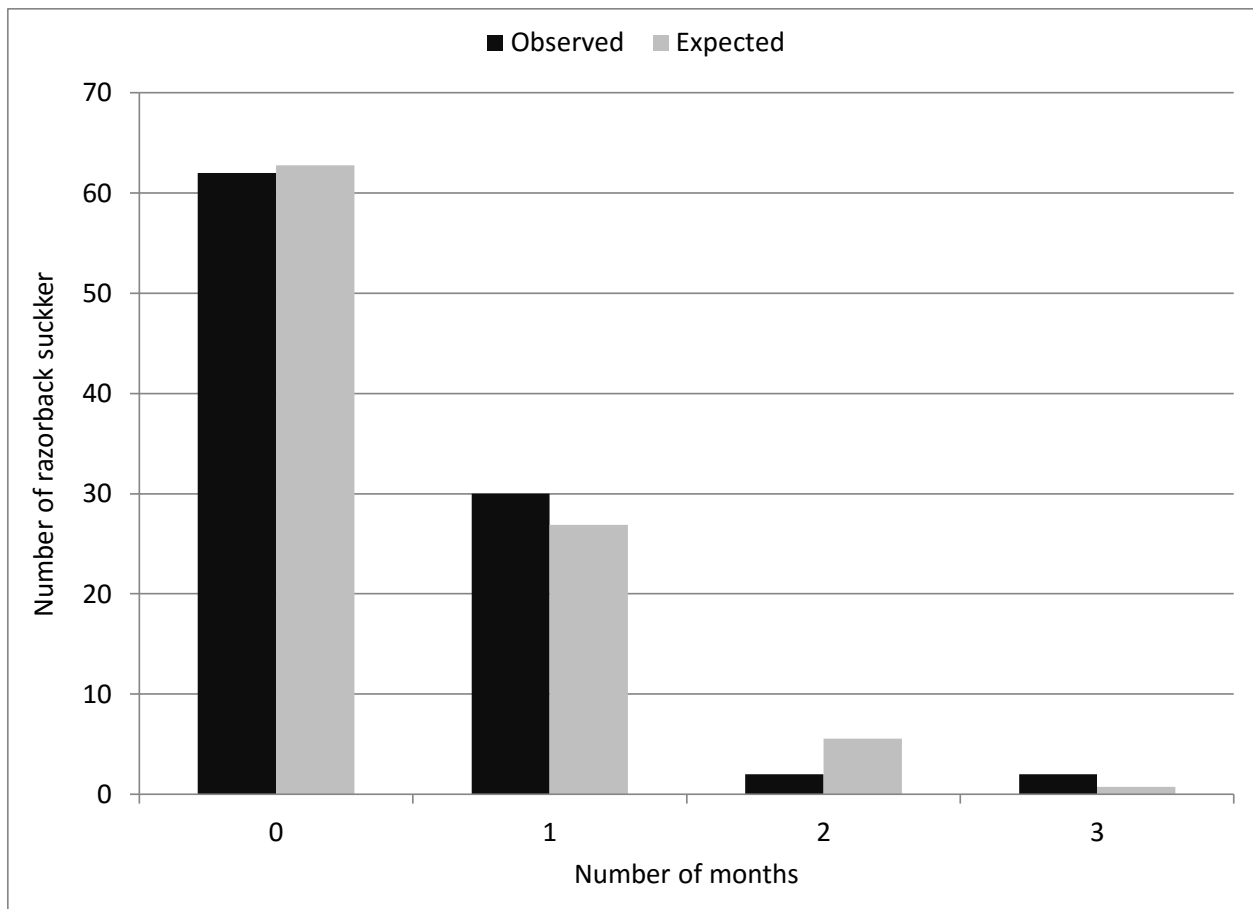


Figure 5. Observed and expected number of months that individual razorback sucker was PIT scanned in more than one zone in a month over a 32 month period from January 2013 through August 2016. Ninety-six razorback sucker that were released prior to October 1, 2012 and scanned in 2016 were included. Expected counts were based on an expected capture probability of 0.12 for River and 0.11 for Basin.