

Summary of Lower Colorado River Native Fishes Database Activities for 2014



CAROL PACEY

MARSH & ASSOCIATES, LLC



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Native Fish Work Group Database



- Native Fish Work Group (NFWG) founded in 1990 with all fish stocking and monitoring data centralized at Arizona State University
- All data currently centralized at Marsh & Associates LLC
- NFWG database currently holds 425K records of PIT-tag data +



Current Repatriated Razorback Sucker Population Estimate in Reach 2, Lake Mohave, AZ-NV



<i>N</i>*			2,525
95% Confidence Interval		<i>N</i> Repatriates Released (as of March 1, 2013)	Estimated % Survival
Lower	Upper		
1,180	5,741	184,252	1



Razorback Sucker Captured 2014 in Reach 2, Lake Mohave, AZ-NV



Gender	N Fish Captured in 2014								Grand Total
	Without PIT Tags ^a				With PIT Tags ^b				
	Mar	Apr Jun Jul Aug Sep Oct	Dec	Total	Mar	Apr Jun Jul Aug Sep Oct	Dec	Total	
Female	3	1	5	9	87	35	33	155	164
Male	0	6	1	7	53	65	14	132	139
Juvenile	0	0	0	0	1	0	0	1	1
Unknown	0	2	0	2	3	24	2	29	31
Total	3	9	6	18	144	124	49	317	335

^aAll fish marked as repatriates in database

^bSame-trip captures (N=2) included in analysis



Interesting Notes about PIT-tagged Razorback Sucker
Captured 2014 in Reach 2, Lake Mohave, AZ-NV



- **Of 335 captured PIT-tagged fish, 231 (69%) had year class data which ranged from 2000-2011**
 - 208 fish (62%) captured in trammel nets while 97 fish (29%) captured by electrofishing
 - ✦ The smallest fish captured in trammel nets was 31 cm while the smallest fish captured with electrofishing was 48 cm
 - 156 fish (47%) fin-clipped for genetics
 - 65 fish (19%) with at least one health comment
 - Two fish (1%) were same-trip recaptures

PIT-tagged Razorback Sucker Captured 2014 in Reach 2, Lake Mohave, AZ-NV



Gender	N Fish Captured in 2014 ^a								Grand Total
	Repatriate				Unknown and Wild ^b				
	Mar	Apr Jun Jul Aug Sep Oct	Dec	Total	Mar	Apr Jun Jul Aug Sep Oct	Dec	Total	
Female	87	36	36	159	2	0	1	3	162
Male	53	70	13	136	0	1	2	3	139
Juvenile	1	0	0	1	0	0	0	0	1
Unknown	3	26	2	31	0	0	0	0	31
Total	144	132	51	327	2	1	3	6^c	333

^aSame-trip captures (N=2) omitted from analysis ^bOne unknown and five wild fish

^cAll six fish were tagged in either 2003 or 2006 and could possibly have been repatriates



PIT-tagged Repatriated Razorback Sucker Reared in Off-Site Facilities Captured 2014 in Reach 2, Lake Mohave, AZ-NV



Rearing Location (RL)	Total N Fish Released ^a	Total N Fish Captured (% Total)	N fish Captured 2014 ^c				Total
			Mar	Jun	Aug	Dec	
Achii Hanyo SFH	7,336	181 (3)	28	10	6	44	
Boulder City Golf Course Ponds	6,977	254 (4)	1	2		4	
Boulder City Wetlands Park	8,555	119 (1)				14	
Bubbling Ponds FH	15,858	283 (2)	3	22	4	29	
SNARRC (Dexter NFH)	9,109	85 (1)	2	24	0	26	
Lake Mead Fish Hatchery	13,140	8 (3)		1	1	6	
Willow Beach NFH	14,300	121 (1)	25	4	9	90	
Total	163,908	2,627 (2)	79	110	24	213	

1-7% of total fish stocked seen again!



PIT-tagged Repatriated Razorback Sucker Reared in Lakeside Backwaters Captured 2014 in Reach 2, Lake Mohave, AZ-NV



Rearing Location (NLR)	RL Total N Fish Released	RL Total N Fish Captured (% Total)	N fish Captured 2014 ^c				Total
			Mar	Jun	Aug	Dec	
Arizona Juvenile	4,463	209 (5)	9	2	6	17	
Dandy Cove	5,852	173 (3)	8	2	1	11	
Davis Cove	1,378	78 (6)	0	0	1	1	
Nevada Larvae	1,717	5 (0)	0	0	0	1	
North Chemehuevi	4,728	222 (5)	8	1	0	9	
North Nine Mile	233	34 (15)	0	0	1	1	
South Sidewinder	500	44 (9)	0	1	1	2	
Willow Cove	54	34 (5)	4	0	0	4	
Yuma Cove	13,796	734 (5)	5	3	10	39	
Total	33,616	1,614 (5)	56	10	19	85	

3-15% of total fish stocked seen again!



Interesting Notes about PIT-tagged Razorback Sucker Captured 2014 in Reach 2, Lake Mohave, AZ-NV

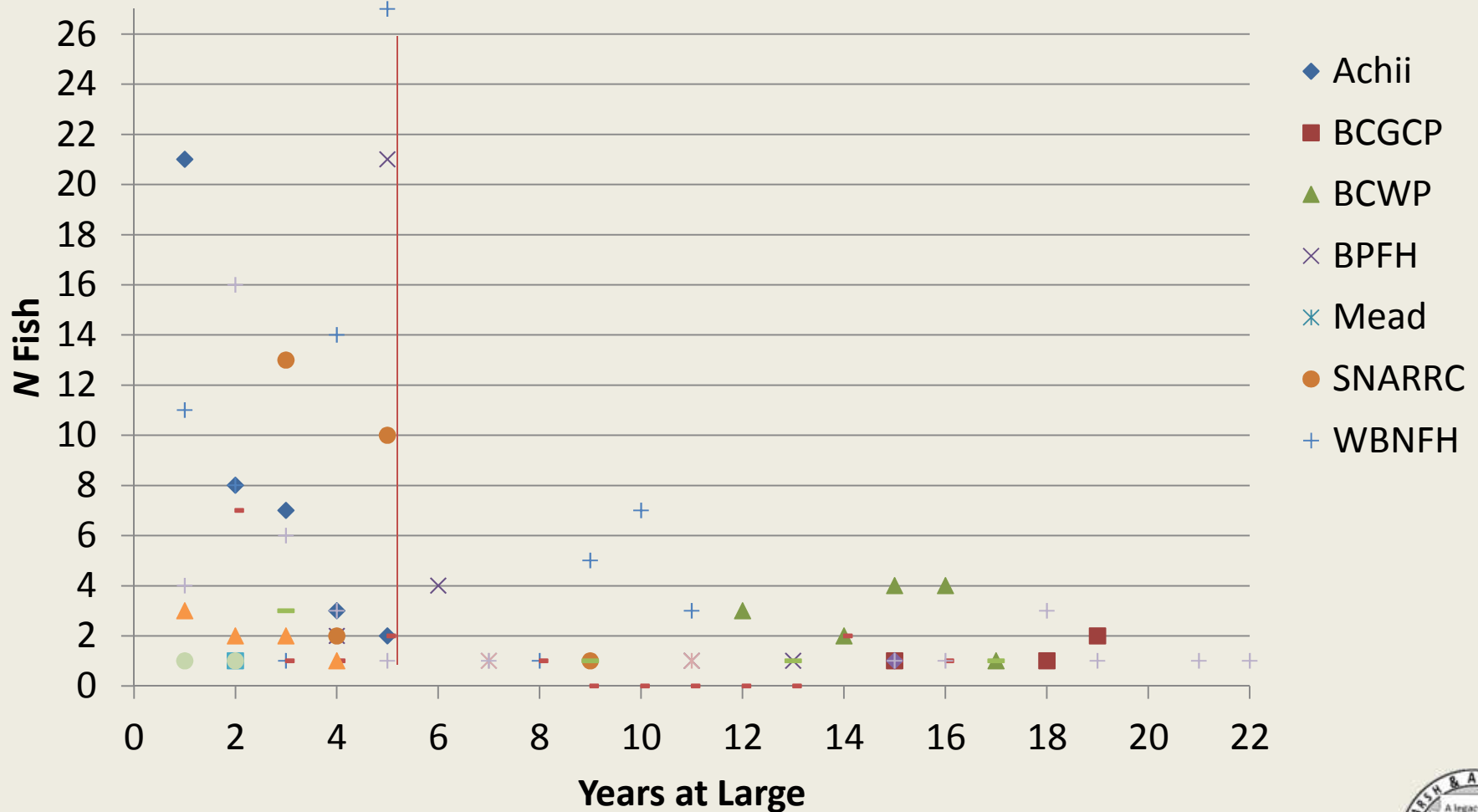


- **Of the 300 fish with paired release-capture data, 163 fish (54%) were \geq 35 cm at release while 95 fish (32%) were \geq 45 cm at release**
 - 63 fish (21%) time at large 6-22 years; 27-68 cm TL at release ($N=61$ fish)
 - 207 fish (69%) time at large 1-5 years; 31-54 cm TL at release ($N=116$ fish)
 - 30 fish (10%) teimeat large less than a year; 31-55 cm TL at release ($N=27$ fish)

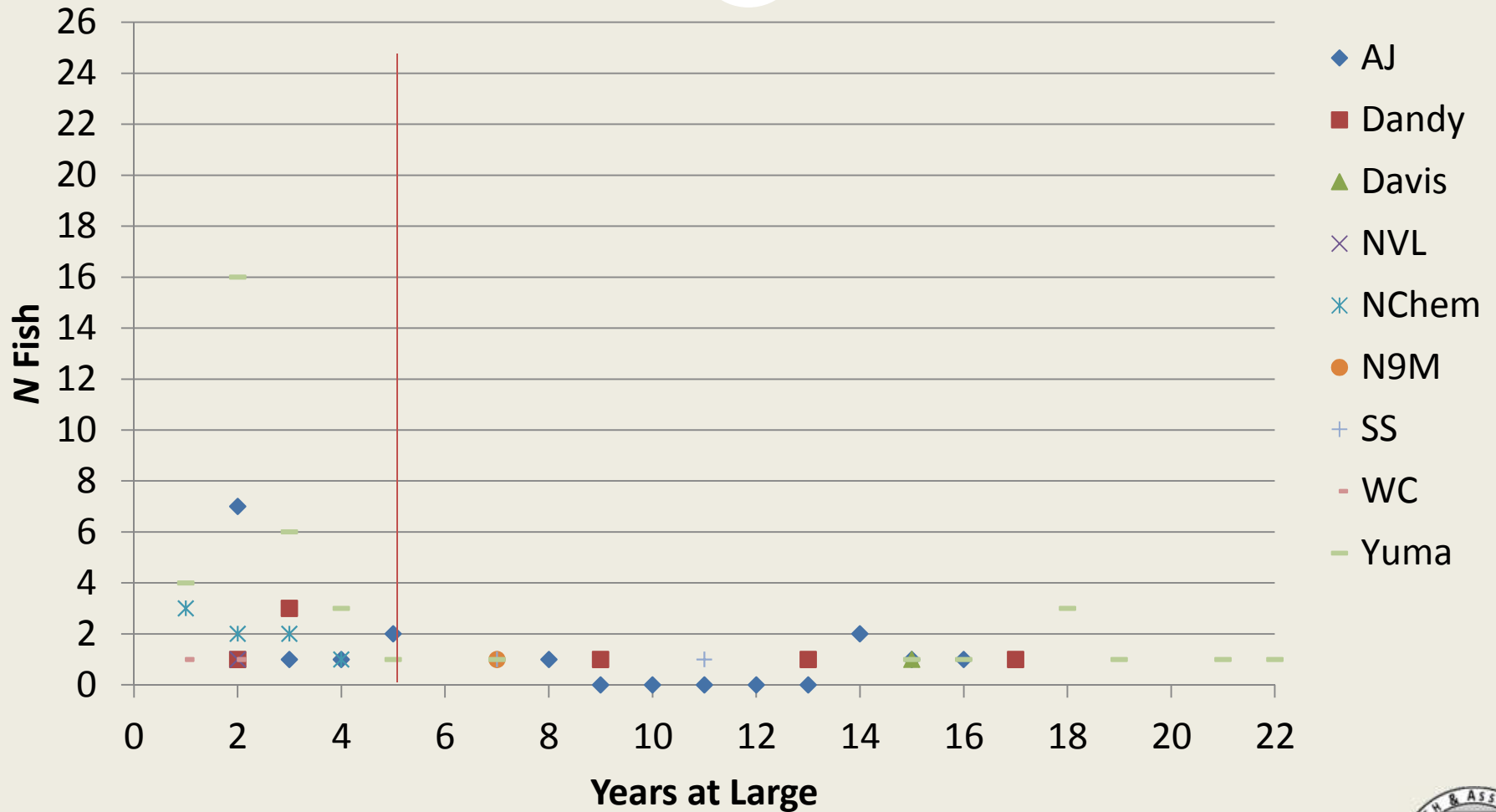
 - 17 fish approx 5-6 years old at stocking
 - 151 fish approx 3-4 years old at stocking
 - 44 fish approx 1-2 years old at stocking

 - 88 fish (29%) had no year class data to determine approx age with about 50% of these fish split between off-site facilities and lakeside backwaters

Years at Large of 213 PIT-tagged Repatriated Razorback Sucker Reared in Off-Site Facilities Captured 2014 in Reach 2, Lake Mohave, AZ-NV



Years at Large of 85PIT-tagged Repatriated Razorback Sucker Reared in Lakeside Backwaters Captured 2014 in Reach 2, Lake Mohave, AZ-NV



Interesting to Note about Razorback Sucker Repatriated 2014
in Reach 2, Lake Mohave, AZ-NV



- **Of 12,322 repatriated fish, all had year class data which ranged from 2008-2012**
 - 97 fish (<1%) classified as either female or male even though more than 3,400 fish were 35-44 cm ($N=3,367$) and ≥ 45 cm ($N=104$)
 - 15 fish (<1%) fin-clipped for genetics
 - None had any health comments

Razorback Sucker Captured 2014 in Reach 3,
Lake Havasu, CA-AZ



- **More than 6K fish repatriated to Reach 3 in 2014**
 - 5,265 fish (85%) were \geq 35 cm TL at release with 805 of these fish \geq 45 cm TL at release
- **201 fish captured in Reach 3 in 2014**
 - 162 fish (81%) with year class data which ranged from 2002-2012
 - 143 fish (71%) reared at Bubbling Ponds FH with year classes ranging from 2007-2012
 - 65 fish (32%) were captured in Jan with remainder captured in Feb, Mar, Apr and Nov

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Hatchery crews at Achii Hanyo FH,
Bubbling Ponds FH, NDOW Overton Wildlife
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Resources & Recovery Center, Lake Mead FH
and Willow Beach NFH