Dr. Brett M. Johnson 970-491-5002

970-491-500 52

NARRAGUIN	NNEP RESERVOIR GILL NET DA	ATA SHEET
Net type AH Netnum 1	Personnel BPBJ CF	Page /_of <u>Z</u>
SET: Date 04/0 3/18 Mil time 1530 U	ITM 128 0709 403 4151 2043	Direction Depth 2 - 8 m
Site location dam along hwy	1	labitat riprap by rord
Site location day 411/4 104		
LIFT: Date 04/04/18 Mil time 09/7	Comments SUNNY, 703 E WIND	5-70

										.0"	s sa dend				
Sample ID WBCmmddyy###	Mesh	TL (mm)	Wet Wt (g)	Sex M/F/U	Gonad wt (g)	Repro.	Deformity, disease	W H O	M U S	0 T 0	G U T	G O N	<b>B</b> L O	S P I	Other
部	Rewn	504		M	BAN	rype	livere	0	0-	0	0	0	0	0	released
	٨	545		M		ripe	dead in	0	0	0	0'	0	0	0	bucket
001	1)	545	_	F			Lead	D	0	0	00	D	0	0	Ø
002	ij	469	980	M	14.9		live	0	1	1	0	1	1	0	/
003	- (1	473	985	M	14	ripe	~live	Ò	1	1	0	1	1	0	i i
LOC	Bue	592	-3				live?	0	0	0	0	0	0	0	released
004		575	2089	M	34.4	ripe	lue	0	1	1	0	1	1	0	MT
2005	Plot 4	595	1787	M	29.6	nige	lve	0	1	1	0	1	1	0	
006	Whi	465	914	M	16.0	vipe	live	0	1,	1	0	1	1	0	
007	11	452	869	M	25.1	ripe	live	0	t	1	0	1	1	0	
008	Whi	470	981	MM	3.2	?	live	0	1	1	0	1	1	0	IMMATURE PIC
009	-	426	713	M	6.8	ripe	live	0	1	1	0	1	1	0	
010	and the second	456	811	M	7.6	Nipe	live	0	1	1	0	1	1	0	MT
011	Whi	470	-	и		3	~live	0	0	0	0	0	0	0	dead
012	Whi	376	_	M		dipe	dead	0	0	0	0	0	0	0	derd
	lt.	460	74.0	M		ripe	released	N	0	0	0	0	0	10.00	
013	ų	409	666	M	8.9	vipe	live	0	111	1	0		1	0	
	ı	475	-	M	1 2 2 1	ripe	dead	0	0	0	C	0	C	0	backet de
014	ly.	444	843	M	16.0	ripe	live	0	1	1	0	)	1	0	TOTAL SHAPE STREET, STREET, STREET, ST.
015	н	441	858	M	22:8	vipe	live	C			U			0	

WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WB codes: Narraguinnep=NAR, Jumbo=JUM, Jumbo Annex=JAN; Spp codes: Walleye=WAL, Sauger=SAR

COMMENTS: SMall mesh Set inshave

1) MISSING TAG My 426 775 M Vipe we did not save blood samples from 2) MISSING 370 464 M II shear three because we could say missing 360 427 M MP be sure who was u ko. No sau

we did not take samples on any dead fish, sust TL

# NARRAGUINNEP RESERVOIR GILL NET DATA SHEET

location T: Date <u>04/ 04/1</u> 1		ime	0937	Comr	nents				"1" denotes	sample w	as	
0			TL	Wet Wt	Sex	Gonad	Repro.	Deformity,	taken, "0" (0" (0" M M O H U T O S O	G G B U O L T N C	SP	Other
Sample ID WBCmmddyy###	Mes		(mm)	(g)	M/F/U	wt (g)	rèpe		000	000		(nelcased)
	Wh		451	0.5:	M	2.5	7	lite	011	01	10	MALE
016			453	851	M	-	Vipe	live	000	000	20	
	Re	<del>-</del> -+	507		M		Whe	live	000	00	00	Y
_			480		M		Vipe	live	000	00	00	11
			502	-	M	- K	ripe	live	000	00	0 (	)
		1,	478		- 44	13.0		live	01	101		OMT
01	1	let.	5制	1461	M	8: 15:11	Vipe	live	00	0 10 10	2	2 DIED
\$ 912 01		ack		1 7,	500 13		7	live	01	101	14	O PIC
tere	7	H .	439			- 10		///	01	101	1	0
Ü	0	1	368			18		live	0 1	10	11/	0
0	21	h	354	7 41	0	700	19. 461	ms				
			-								_	
							117		1			
		- 0	_									
								1			1-1	
									15			

COMMENTS: running back to truck to get ice for trough

Set nets later tonight, too many mortalities this morning

TAKING there were several we took piece of that we called humature was

- we need to look at preserved gonads to verify

Fishe	ries Ecology Laboratory ado State University									572		: :::	, J					
	3-1	NAR	RAGUI	NNE	PRE	SER	VOIR G	ILL NET	T DATA S	HE	:E1				Pa	ge	1	_of(_
Not	type	Neti	num	P	ersoni	nel _	3P BJ	UCIN	148 Dire		on.		/	 De	pth	1		_2_m
SEI	: Date 04/ 03/18 N								Habita	t	ni	01	pop	1	bn	nsi	1	
LIF	location	Mil time	<u> </u>	_ Co	mmen					"1	" der ken,	otes	san	nple tes r	was one			
	Sample ID		TL	Wet \	∧t S	Sex I/F/U	Gonad wt (g)	Repro.	Deformity, disease	SIO	M U S	0 T 0	$\sim$			S P	11	Other
-	WBCmmddyy###	Mesh Oc	(mm) 368			М	=	ripe	lost A6?	0	0	0		0		DA	live	
_	022	11	375	43		M	7.2	v:pe	MT	0	1	1	0		1	0	di	
	023		0.0	17	-					0	0	0	0	0	0_	U		leased live
	NPK	Red	790			M		ripe	=		0	0	0	0	0	0	rel	eoud live
	WAL	Whi				M		vipe		0	0 0	0	0	0	0	0	li	ne released
		Whi	461	S III		M		ripe			0	0	0	0	0	0	1"	ıl .
100		Whi	448	À		1 200		vipe	-		00	) (	) (	) (	70	)0	d	call cook
	WAL		487			M		110		-	0	1	110	)		11	9/	ire PLCZ
-	024		424	_	61	M	2.0	I rife	truce	-	o			0	1	11	9/	ive MT
78	025	42	3 42;	3 6	80	M	3,2	27.847 5.34			6	0	0	0	6	0		rele lip
-	WHL		45	9		M		vipe			6	0		<u> </u>	-	0	0	dead
-	WAL	11	47	6		M	C. 10	daje	18.	26	2				0	7	0	MT
}	026	111.6	A 37	3	494	M	5.1	tipe	98	텐	10	1	2	1	_	<u> </u>	0	released
	WAL		441	1		W		v. pe			0	8	0	0	0	0	0	released
	WA		45	-		M	10	ripe			0	+-	_	$T^-$		1	1 6	The state of the s
	= "		5,00	15		(	~	_			0	+-	0	$\top$	+	+-	arts.	live release
	NPR			35		+-					0	0	0	Č	C	10	0	11 4 11
	NPI	_		17								1	1	1	1	1	+	87.732
			- 2		1		=		gr <sup>m</sup> III					1	1	1	1	= 5
> 1								1975										
							(4)											- 254
			- do alua	OTO	)=otolith	n. SPI	spine, GU	T=stomacl	n, GON=gona	ad, E	SLO Sa	=blo	ood	SAF				

WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WB codes: Narraguinnep=NAR, Jumbo=JUM, Jumbo Annex=JAN; Spp codes: Walleye=WAL, Sauger=SAR

added 2 bags of ice to trough, will change water frequently?

The surprised that 120' 11 set caught so many fish

fish are much more stuck in nets than last-more active up higher temps? COMMENTS:



type <u>4 H</u> F: Date <u>04/ 03/18</u> Hocation <u>d 44</u>	Mil time	Cl. da .	UTM 12	s <u>170</u>	9625 hins	4151	106 Dire	cti	on 🖟	-t	_ 	_ D	ept	:h_ <u>_</u>	<u>2</u> - <u>/ S</u> m
T: Date <u>04/<i>04/</i>18</u>	Mil time	e 1028	_ Comn	nents _	<del>""))</del>			_	+		<del> </del>				
Sample ID	Mesh	TL (mm)	Wet Wt	Sex M/F/U	Gonad wt (g)	Repro.	Deformity,	w H			den	otes	non	S	Other
WBCmmddyy###	Red	506	(8)	M	111 (8)	ripe				0			1		reliased
027	Hab	426	疆	ч			lost tag?	0	Ó	a	0	0	$\overline{}$		
	и	462		M		vipe		O	O	0	0				
SMB	blue	446						6	б	0	0	0	0	0	" relea
028	Wa/whi	361	427	M		ripe	wettyp.	0	1	1	0	1	1	0	Kept
STORY TO	4	449	- 50	M		Vipe	10,	0	6	0	0	0	0	0	1 11
	Red wh:	524		M		wipe		0	0	0	0	0	0	0	dead
1165.4	i ii	462		M		vipe		0	0	0	0	0	0	0	rel
	11	480		M		ripe		0	0	0	0	0	0	0	Λ
	b	458		M		ripe-		0			1	1		0	11
	[]	511		M		ripe		D						0	4
	U.	470		M		vipe	id ship han	0						0	devd
	Ye whi	478		M		Vipe		0	J	J				0	live re
	11	480		M		Vipe		C	0	0	0	C	1	0	like n
					1										
												$\Gamma$			
	+	1								T				Τ	

COMMENTS: warm (90's) + calm, sunny won
we examined stomachs, only Regt a sample if full

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Net type	H 11 04/18 Jam	Ne	etnum	   Pers   UTM 12	onnel <u> </u>  S 070	8PBJ ( 09398	4151	061_Dir	ecti	on	_	L ra	D P	_ l ept	Pag th_	e 1 of / Z - 8 m
Site location	4 <i>j 05  </i> 18	Mil tim	e #84	5 Comr	nents _	small	mesh on	shore	-	1" de					<u> </u>	
Sample I WBCmmddy		Mesh	TL (mm)	Wet Wt	Sex M/F/U	Gonad wt (g)	Repro.	Deformity, disease	l ti	M U S	. "0"	den	otes	non	e ˈ	Other
WBCmilliady	101	Bach		373	M	5.2	4		0		1	0	1	1	0	MT
	on	whi	450	: <u> </u>					0	0	0	0	0	0	0	released
onlygat 1 ato	002	whi	414	579	M	9.0	4		0	1	1	0	t	1	0	MT
				-		121	,				<u>.</u>					
					i to	2										
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- 3	77		1			W										
			7	<del> </del>			10									
		<del>                                     </del>														
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					+					10						
			-		_				_	$\dagger$		+	$\dagger$		+	^
		-	-			+				+	$\dagger$	+	+	+	+	,
- 1). A.			-		-			22			$\dagger$	+	$\dagger$	+	+	
									+	+	+	$\dagger$	+	+	$\dagger$	
WB codes:	Narraguin	nep=NAF	٦, Jumbo=	JUM, Jum	ibo Anne	x=JAN S	p codes: v	ON=gonad, E /alleye=WAL	SLO=	-blo ugei	od r=S	AR				25
COMME Set	NTS: 5 3 cmy (00)k	fish to	axer to apo ne th bet	night to	e gills	nets esterd	anocraca ay-sl	varten s	et							

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T: Date <u>04/ 05</u>	8 Mil tim	ie <u>0853</u>	_ Comm	nents _	Chryson Touris			Total	۔ در ۱۱	nete		melo	was		<u> </u>
Sample 1D	, ,	ΤL	Wet Wt	Sex M/F/U	Gonad wt (g)	Repro.	Deformity,	₩ WHO	ken,	. "0"	deno	ites	none B L O	3	Other
WBCmmddyy###	Mesh	(mm) 542	(g) (602	F	217.5	4 eggs last	0	0	1	1	0	1	1	0	live M
olue 003 olywhi olek	4 Black	359		M				0	0	0	0	0	0	0	dend
DIN WOLL VO	black	354	_	M		4		0	0	0	0	0	0	0	donal
004	DE 7870 - 1	597	2121	F	220.2	4 running	Ø	8	1	1	0	-	_	1	live
	Whi	458	_	M	- 15a	4		_	-	_	_	_	-	-	release
1985A.5	Gre	465		M	Description of the second	4		0	0	0	0	0	0	0	release
	Gre	469	-	M	j	4		0	0	0	6	0	0	0	released
<u> </u>		- 8						+	1	T	1	T	I		
		W - 10	-					1	1	1	1	1	1	1	-
								1	1	1	1	+	$\downarrow$	+	
								1	1	1	+	1	1	1	-
13-2								4	1	+	+	-	1	+	
						-		1	+	+		+	+	+	
						1		1	1	1	+	-	+	+	-
								-	+		+	+	+	+	-
								1	1		-	+	1	+	
								1	1	4	-	4	+	+	-
								-		$\dashv$	+	+	+	+	-
						0.2			$\dashv$	1	+	+	-	1	+
WHO=whole fish, I WB codes: Narrag COMMENTS:		9 14	7					. 1							

Net type							ET DATA				,		_	Pag	ge <sup>{</sup> of
SET: Date 04/ 07/18	3 Mil tim	1e 17 18	UTM 12	28 <u>071</u>	9713		//6/_ Dir	ect	ion	<u>'</u> _	<u> </u>		ер	th <u>&gt;</u>	<u>36 -&gt;10 m</u>
Site location <u>dam</u> LIFT: Date <u>04/05 /18</u>	Mil tin	ne 907	Com	nents _	large me	sh onshor	Наріт: ¢	at	<u></u>	P-	<u>r</u> a	P			
	-							T •	1" de	note	S 58	mpl	ewa	s T	
	Mesh	TL (mm)	Wet Wt (g)	Sex M/F/U	Gonad wt (g)	Repro. condition	Deformity, disease	W Н О	M U S	0 T 0	G U T	G O N	B L O	S P i	Other
NO FISH															
NO FISH It appears to	e net	drift	ed to	deep	wite	v									
•															
				.11											
			1, = =	(7)								4	W		
						*									
		( sc )													
														_	JOK S
			.03												Way I
															N. Sant Sant
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							-								
															1856
							- 5								
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											7				·
														_	
WHO=whole fish, MUS= WB codes: Narraguinne	muscle p	lug, OTO: lumbo=JU	otolith, SF	Pl≕spine, Annex≕J	GUT=stor	nach, GON	=gonad, BLC	=blc	ood	ΔD				_	0
COMMENTS: NE	wind	10 mp	h+, pt	h cld	1.400		5,5° 11,12,00	uge	1-0	·/ · · ·					0
spoke w/ sherit	of dep	ity J.	Goodel	e ha	offene	1 10 4	ely w/	bu	he	34					
spoke w/shering	W.	Le .	notify (	how. F	FNex	f-tribo		,							
(red mesh o	Mshore	L)			^										

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Dyang was not like the gards white pink out we've been calling man male we saw goof no growe thin males are larger, pink, grove males are larger, pink, grove 970-491-5002

NARRAGUINNEP RESERVOIR GILL NET DATA SHEET

=7	: Date <u>0</u> 4	106/18	Mil time	0815	Comm	ents	cionay,	10M 38	ENE 5	11'1'	den	otes	san	nple	wa:	s e	Г	
	Sample II	0	Mach	TL (mm)	Wet Wt	Sex M/F/U	Gonad wt (g)	Repro.	Deformity, disease	W H O	MU	0 T 0	G	G O N	B L O	S	-	Other
_	VBCmmddy	119	Mesh	468	939	M	0.6	ammar.		0	1	l	0	1	1	0	+	
-		140	blauhi		1461	M	19,9	4		0	1		0	1	1	0	+	live p
		011	Whi	450	836	M	9,0	4		0	Ц	1	0	1	4	10	4	MTI
		012	h	412	598	M	3.4	Respont	bloodshot	0	1		0	1	+	+	+	ling
	yellu		粉	420	676	M	5.2	4 spent	STANACH TIGHT	0	1	1	0	1	+	+	+	live r
	g-l	014	yell	455	827	M	12.6	4	The last	0	(	1	D		+	+	+	1 he
	M.	015	red	524	1533	M	5.3	IMM.	100	0	1	1	0	-	4		0	live
		16	1.11	507	1257	M	15,5	4		0	1	1	0	+	4	-+	0	MT
_		17	Man bla	461	952	M	16.6	4	-	0	+	1	1	+	4	1	+	live MT
_		18	SC #	529	1563	M	30.7	19	-	0		4	1	4	4	4	0	747
	-	7-70-3		-				-			+	+	-	+	+	31	0.00	98 d
-	William .							-	-	200	+	+	-	+	-			Talling III
								-	-	-	+	+	+	-	$\dashv$		3.3	
								-		-	+	+				-	+	
-											2	jui,	9		-	+	+	
									-		-		-		-	+	+	
-						-	-	-	-100				-	_	+	+	+	
1							-					-	-	-	+	+	+	2000 200 1000
1					30						_	-	-	-	+	+	+	

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te location <u>W d 4</u> FT: Date <u>04/ 16/18</u>	Mil time	0810	_ Comm	nents				1 11	l" de	note	3 <b>5</b> 21	mple	was		
Sample ID WBCmmddyy###	Mesh	TL (mm)	Wet Wt	Sex M/F/U	Gonad wt (g)	Repro.	Deformity, disease	w H O	M	"0" O T O	G U T	G	B L O	S P	Other
NPK		567		F	-	4		0	0	0	0	0	0	0	live re
001	Red	500	1251	M	16.4	4 4 spent	0	0	વ	1	0	1		0	n M
002	þ	515	1259	MAF	49.9	4 3/4 + spent	0	0	1	1	0	1	1	0	11 M
NAK	3	601		M				0	0	0	0	0	0	0	live re
NPK	2	546		U	_			0	0	0	0	0	0	0	" re
003	whi	419	702	M	2.1	IMM		0	1	1	0	1	1	0	n MT
004	ľ	455	814	Mª	3.3	IMM	see note	0	1	1	0	1.	1	0	11 MT
005	ħ	469	862	M	10,3	spent	TOP THE	0	1	1	0	1	1	0	y MT
006	blu	515	1375	F	120.7	4 running		0	1	1	0	1	1	Ø	nT
007	Rewh	504	1296	M		4		0	0	0	0	0	C	0	dead
008	IL	490	990	M	7.1	4	383	0		1	0	1	1	0	MT
- ON	-			3				1		1			1		
					0,					L	1	1	1	1	
						72		1		1	1	1	-	1	-g-ti-
							1		1	1	1	1		1	
		C ONE							1	1	1	1	1	1	000
n <sub>f</sub>									1	1	1	1	1	1	
									1	1	1		1		
	Jan.							1	1	1	1		1	1	

	04/ <i>UU</i> 18	Mil tin	ne <u>083</u>	<u>/</u> Comr	nents _	caught	net in p	rop, not 6						y h		#
Sampl WBCmmd		Mesh	TL (mm)	Wet Wt	Sex M/F/U	Gonad wt (g)	Repro. condition	Deformity, disease				G U	G O	non B L	e S P	Other
	019	Whi	453	907	M		immatuse	2	0	0	0	0	0	0	Ó	dead
	SMB	JI		N			Ä		0	Ü	0	0	0	0	0	live
untagg	ed dead	y	445	926	M	16	4	4.1	0	0	0	0	0	0	0	Lead
020	0/440	и	407	607	M	11.2	4	<b>3</b> /-	0		1	0	1	1	0	live
The T	021	Red	504	1215	M	26.4	4 25 pent		0	t	1	0	1	I,	0	" MT
BLOOD?	022	11	535	1554	F	237.3	ripe	À	0	1	D	0	M		0	dead?
	023	4	537	1514	M	24.3	yz spent		0	1	1	0	1	1	0	MUR MT
	024	THE RE	510	1390	aF	22	4		0	1	1	0	1	l	0	·MIT
	025	ារ	547	1744	F	314.4	fully dev.		0	1	Ī,	0	1	1	0	" pic
	026	bla	365	447	M	2.6	4		0	l	1	0	1	1	0	1
oked of which scape	27	= 13	430	653	F	8.4	spent un	5 30-78-1	0	1	1	0	1	1	0	" MT
	28	v	495	1017	M	10.9	spent	<sup>30</sup> 22	0	1	1	0	/	1	0	" MT
	29	ŧŀ	394	548	M	1,9	IMM PICS	, , , , , , , , , , , , , , , , , , ,	0	1	1	0	l	1	0	11 Poor
	130	10	-3.74	452	Μ	4.5	4 Spent:		0	1	1	0	1	1	0	live M7
·	70 10			The same	W.										-	
-	=-							4.2							99	
1, 9				931	Š						Г					
ilen.	Ti)		20	100	k											1 2
	100		a45	3.9	_ =		1					Ж				- 0
																-32
	fich MIIS	=muscle	plug. OTO	=otolith, S	Pl=spine			N=gonad, BLC leye=WAL, Sa							_	12

# PHYSICO-CHEMICAL LIMNOLOGY DATA

		PHYSICO	O-CHEMI	CAL L	OMMI	LOGY	DATA	Data 04	1051	18
Lake Name	NAR	PHYSICO	nel BPB	JCF		41514	May Dent	n at Station	19,8	m
Military Tim	e 0925	Statio	u Next	He lod 2	VC V() ·	1			oundiss	ses)
Secchi (m):	: 1st:_ <u></u>	uS/cm Turk D\$ 206 D.O.	pidity $\frac{4.9}{2.9}$	4_ NT	U W	eather	partly clau	dy apper 4	U'S, WIX	<u>d cali</u> med di
Conductivi	· -	DS 206	pH 38.5	6 90	De	epth	Temp	D.O.		22
Depth (m)	Temp (°C)	D.O. (mg/L)				,	(°C)	(mg/L)		-
Surface	7.2	9.84		1		21	10.			
1	7.2	9.83			-	22		1 1 1 1	是 5	
2	7.2	9.82		-	-	24			Ta man	
3	7.2	9.80		-	-					
4	7.2	9.78		-	-	25		M		
5	7.2	9.76		-	-	26				
6	7.2	9.75		-	-	27			A 629	
7	7.2	9.73	<u> </u>	-	-				1	
8	7.2	9.72		4	-					
9	7.2	9,70				30			33=	
10	7.2	9.68		_	-	35				
11	7.2	9.66		$\rightarrow$	-	40				
12	7.2	9.65		_	:  -	45				
13	7.2			_	1	50				
14	7.2				-	55				
15	7.2	0.10			1	60				
16	7.7	0.00				65			li li	
17	71		8			70				
18	7	9.5	3			75				
19	7.	9.40	7					6		şi li
20	70		11						roto	2097
Comm	nents avmin ton	up = 6.11°		3 21	sau	ples:	1) bulk w 2) preserv 3) 193 s	1500 to	ID	5 10 l
	nents armin ten Silvu hat	ch back	p	H 8.5	2		3) 193 5	mall rusc.	to ID	(Settin

GILL NET DATA SHEET \_ Netnum \_3 Page \_ l of \_\_\_ Water name Narraguinnep Res. Date 03/ 19/18 Net type AH 4151828 Depth 0, 5 - 5, 5m SET: MM/DD 03/19 Mil time 1745 UTM 125 0709284 Location/sampling site Nof pt on west nip rap \_ Habitat vip rap #

FT: MM/	OD <u>03/2/</u> N	lil time			ersonne			Pate, Jim		de vas	note take	e tha	t a s	iores	_		
	is ID		M e s	TL	Wet	Sex M/F/ U	Gonad wt (g)	Repro condition deformity, disease	n, w		O	G	G	L	SPL	-	Other
Samp	ddyy###	SPP	h	(mm)	Wt (g)	4.4	9.5	SPA	0	M	1	1	1	L	10	A	like
NACO3		WAL	94	485	1249	SM	-		Ti	T	1	1	11	11	1	P	Hive
	002	1	tt	528	1407	100	14.7	+	-#	1	1	1	11	1	1	A	Hire
	003		wh	410	673	M	69			+	1	H	1	1	1	-	lead
1	004	+	Wh	462	911	BRA	8.5			+	H	+	H	H	1		Alive
		++	-	418		M	7.1	SPA		Н	11	4	H	H	+	+	41.
	009			-	-	m	4.6	SPA			Ш	1	11	11	H	+	Aline
/	006	-	-	405			4.7			1	1	1	V	1	4	4	Alive
	F 00	- 1	W	415	643	-	-	-									
	111	F			11500	-		-		1	T	T					7000
										+	+	+	+	1		12	
-		1					*		_	+	+	+	+	t	+	+	
-		+	-							+	+	+	+	+	+	+	-
		-		+			J. V.	6		1	1	+	+	+	+	+	Salaher L
		-+			-	100						1	1	1	4	+	3
				+		+									1	1	
	9			1		-+-			_						1		
						-+		3-5		8	The second		П				1
-									-/	0	+	+	H			$\sqcap$	
		-	-	TT			7			_	+	+	+	-	+	H	
-	7.0			++				7 6		_	+	+	+	+	+	+	-
	<u> </u>		-	++							1	1	+	+	+	+	+
	00			+-			-	SPI=spine, GU			1	1	1	1	1		

WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WHO=whole fish, MUS=muscle plug, GUT=stomach, GUT=stomach

COMMENTS: small mesh on shore

Netnum 2 Page 1 of 1 Water name Narraguinnep Res. Date 03/19/18 Net type A 1+ Depth2,5- 5,5m SET: MM/DD 03/19 Mil time 1731 UTM 125 0709 272 Location/sampling site NW and of ripray W. oframe Habitat rip rap

LIFT: MM/DD 03/20 Mil time ///5 Personnel B Johnson, B Pate,

T: MM/DD 03/20					T			"1" V	den vas t	aker	tha 1, "0"	der	amp	S S	
Sample ID	SPP	M e s h	TL (mm)	Wet Wt (g)	Sex M/F/ U	Gonad wt (g)	Repro condition, deformity, disease	W H O	M U S	0	G U T	G O N	B L O	S P	Other
WBCmmddyy### 972032018008	WAL	12	475	1033	m	14.7	SPA	0	1	-	1	1	1	14	Alive
109	1	PW	424	806	m	10.1	SPA	$\parallel$	-	-	-	-	H	#	Alive
010	11	11	456	922	m	8.8	151A	11	-	-	-	$\vdash$	+	H	Hire
011	11	11	492	1205	M	17.1	SPA	1	-	+	+	+	+		-
012	1	1	517	1373	m	30.8		1		+	+	+	+		Alive
013	11	Blu	537	1589	m	22.1	SPA	+		+	+	+	+	#	Deadi
014	11	Whi	100	100	M	9.6	05.10	1	-	+	+	+	-		Alive
015	· Ž	1	462	904	m	9.7	SPA	1		55	60	+	+	+	Alive
DIb	11	1	406	612	m	4.4		1	$\parallel$	+		-	-	╢	Alive
017	11	W	11 442	- 907	m	12.6	-	-	1	-		-			355
018	11	R	480	1 1050	m		ACT TO THE PROPERTY OF THE PARTY OF THE PART	* S		-		į	_		Alive
019	- 10	R	e 480	109	5 m	16.3	the state of the s	er.	4			<sup> </sup>		#	Perd
026	, 11	R	e 493	109	4 m	12,		1	1	-	-	V 97	-	╫	Alive
02	1	R	e 54	ı 171.	2 M	15.0	SY4		1	-	-		+	W	Alloz
			107	1				-		-	+-	+	+	+	-
		28			1	_		-	+	+	+	+	+	+	
					-	- 1	4	_	1	+	+	+	+	+	+ +
								_	+	+	+	+	+	+	
								_	+	+	+	+	+	+	
- N			90	lo plus (	TO=ot	olith, SPI	=spine, GUT=sto nex=JAN; Spp o	ma	ch,	GC	N=	gor	nac	I, B	LO=blood

COMMENTS: small mesh ans here

Nice NPK, released Adam's scale-accurate? yes, ok but don't bump it, will get error i wood for gonad weights

## GILL NET DATA SHEET Water name Narraguinnep Res. Date 03/ 19/18 Net type AH SET: MM/DD 03/19 Mil time 17/7 UTM 125 0709221 Netnum 1 Page 1 of

Location/sampling site West side dann-off ramp I Habitat Vip rap

LIFT: MM/DD 03/ Mil time 1/35 Personnel B Johnson, B Pate

FT: MM/DD <u>03/</u>	T	11				J. h		"1"   w	den as ta	otes aken,	, "0"	den	otes		
Sample ID	SPP	M e s h	TL (mm)	Wet Wt (g)	Sex M/F/ U	Gonad wt (g)	Repro condition, deformity, disease	W H O	M U S	0 T 0	G U T	G O N	B L O	S P	Other
WBCmmddyy###	WAL	R	470	948	M	11.5	SPA		_						Alive
023	WA	wl	481	948 943	m	9.4	SPA	-		-	-		   		71/102
		-						+	-	<del>                                     </del>			-	-	
	-	-						-	-		-	-	-	+	
				-	-			+	+	+	+	+	+	+	
296				-	-	-		+	+	1	†	1	+	1	
The	-			70	9			-	+	+	+	4	+	+	
رق ا								-	+	+	+	+	+	+	
			<u> </u>	-		- 23	29	9.9							
			A.	_						2					
WI _E							1.5	91	-		-	-	-	200	9
1									+	-	-	-	-	V.	6
									+	1			1		<i>\$</i>
	1								+	+	+	+	+	+	
							Tec		+	+	+	+	+	+	+
				91			Pi=spine, GUT=sto nnex=JAN; Spp c		ch	GO	N=	gor	ad	BL	O=blood

WB codes: Narraguinnep=NAR, Jumbo=JUM, Jumbo Annex=JAN; Spp codes: Walleye=WAL, Sauger=SAR

COMMENTS:

Netnum Page of 2 Depth 0.5 - 6.5m 1 SET: MM/DD 03/20 Mil time 1900 UTM [25 0709424

Location/sampling site Wiprap dong road

Personnel B Johnson, B Pate, Jim White LIFT: MM/DD 03/2 Mil time 910

IFT: MM/DD 03/2/ MI				žas I.	1433		1			"1" V	den vas t	aker	١, "0"	t a sa	ump iote:	3	
Sample ID WBCmmddyy###	SPP	e s h			Wet	Se: M/F U	-/ G	onad vt (g)	Repro condition, deformity, disease	S HO	M U S	0 T 0	GUT	GON		SPI	Other
1AR032118001	WAL	RUL	4	76 1	070	14	10	0.1	SPA	0	1	1	0	1	1	0	
002	117		1000		735	W	`-	7.8	SPA	11	1	-	-	-	-	-	Alive
003	90		4	911	065	n	1	1.0	SPA	$\prod$	#	-	+	-	-	+-	Alive
804		+-	4	75	1077	n	1	7.7	SPA	1	$\prod$	$\downarrow$	+	+	+	+	Alive
005		$\parallel$	5	04	1270	n	1	9,9	SPA	1		$\downarrow$	1	+	-	+	
006	THE STATE OF	#	-	372-17	965	24	n	8.6	SPA			4	1	1	91	-	Aline
1000 000 650		#	6	504	1338	И	1	16.0	SPA	$\downarrow$		1	$\downarrow \downarrow$	1	4	-	Dead
007			-	80	1134		n	11.9	SPA				1	1	1		Alive
1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1				456	1279		n	10.8	SPA					$\prod$		$\downarrow$	Alive
019	2 A 3	2)		444	866	110	m	5.8	SPA			,Óà	7	1		_	Alive
010		U,	1	BURGED DV	461	v. 7	M	3.6	SPA	3		8	177	4	g(E	-	Alive
011		1 2	+-+	375	79	50/	M	7,8	Linesken Welten	¥	3	7"	P.	3			Alive
012			1	445	152		M	15.	100	1	1				1		Alive
013		-	55	539	1/-	0.00	m	7.2	1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1				T		1		Alive
014			3	459			HER STATE	10.	23 100179		#	-	1	9		-	Alive
015	1		61	/		-	m	10.0	(A)		$\parallel$	+	SW St	10		1	Aliva
016	37		4/4	461	97	ductor.	15/30(5)	Contraction of	Earl 1	7	+			1	1	1	
017		10		474	of some	980.	M	10,5	253176	7	+	1	+	+	+	+	Aliv
018		Œ	1	455		12:25 %	m	2.		ń.	+	1	+	+	+		Aliv
01	9	111		475	201 (200	MILE I	41900	10.	BLOOK THE MERCHANISH			#		<u>i</u>	+	-	Alive
02	10		Į.	49	3 12	38	W	1 11	SPA spine, GUT=sto	ms	ich	GC	N:	 go!	nad	i, Bl	

WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WB codes: Narraguinnep=NAR, Jumbo=JUM, Jumbo Annex=JAN; Spp codes: Walleye=WAL, Sauger=SAR

COMMENTS:

small mesh in shore

We did not save stomarks today, mostly emptly yesterday + lots of tish to process

Water name Narraguinnep Res. Date 03/20/18 Net type 4#	Netnum 1 Page 2 of 2
SET: MM/DD <u>03/2<sup>0</sup> Mil time UTM</u>	Depthm
Location/sampling site	_Habitat
LIFT: MM/DD 03/2 Mil time Personnel B Johnson, B Pate.	

'1" denotes that a sample М was taken, "0" denotes Sex Repro condition, е M/F/ Sample ID TL Wet Gonad deformity, wt (g) Other Wt (g) disease WBCmmddyy### SPP U (mm) 021 11.9 SPA Alive WAL 502 1241 M 5.1 SPA Alive 022 432 706 M 14.6 SPA 023 1133 m 3.7 SPA 666 414 m 10.2 495 1177 M 9.4 026 1065 475 m SPA

WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WB codes: Narraguinnep=NAR, Jumbo=JUM, Jumbo Annex=JAN; Spp codes: Walleye=WAL, Sauger=SAR

**COMMENTS:** 

Netnum 2 Page 1 of Water name Narraguinnep Res. Date 03/20/18 Net type Att Depth 0.5- 12 m 451114 SET: MM/DD 03/20MII time 1902 UTM 125 070956

Habitat rip rap steep drop Location/sampling site Mprap along res Im White

Personnel B Johnson, B Pate.

"1" denotes that a sample was taken, "0" denotes none		T		Pers	177	time .	ation/sampling site Γ: MM/DD <u>03/∠ </u> <b>M</b> il
Repro condition. W M O G G B S P Other	Gonad wt (g)	Sex WF/ U		15 (1)			Sample ID
(7 Ken 011101110 Alive	6.7	m	(9)		-	PP	WBCmmddyy###
2 0 Alive	3.8		61		7		027
9.9 SPA Alive		u	166	-	le :		028
- Alive		M	088	62 1	1 4		29
11.7 SPA Aline	11.7	M	351	505 1			30
6.2 SPA Aline	6.2	m	196	491 1	20		3
1211 SPA 111 11111111111111111111111111111	7.6	m	1153		1		
1/12 1/12	-	m	545		Pell		32
09 SPA	-	-			14		33
Hive Hive	+ -	+	1078		14e		34
	100	GIF	717	1418	1		35
1 41 in	_	m	734	v4;431	Bla	TL 431	36
18.5 300 HILL	8.3	3 m	428	Whis	Re		
GOIL SPA	601	5 m	80	441		+-	3.7
	1 17.	-	-	470	+	+-	38
7.4 SPA	79			480	+	+	30
61 SPA Alive		-	-	-	-	-	1
Hive		-	-	465	_		4
The state of the s	_		_	455		2	4
n 8.9 SPA	n 8	.7	19:	145		3	L L
		+		#	=	-	
				1		E.	
A RI O-blood		1	-	-		30,	
tolith, SPI=spine, GUT=stomach, GON=gonad, BLO Jumbo Annex=JAN; Spp codes: Walleye=WAL, Sau	tolith, S	OTO=0	e pluq	S=muscl	In BAI	8	<u> </u>

WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLC WB codes: Narraguinnep=NAR, Jumbo=JUM, Jumbo Annex=JAN; Spp codes: Walleye=WAL, Sauger=SAR

COMMENTS:

large mesh who

ROJ2 Water name Narraguinnep Res. Date 03/20/18 Net type \_\_\_\_\_ Netnum 🗲 SET: MM/DD 03/20Mil time 959 UTM /25 Location/sampling site\_ LIFT: MM/DD 03/2/ Mil time \_959 Personnel B Johnson, B Pate, Jan

		M			Sex		Repro condition,			notes taker		der			
Sample ID WBCmmddyy###	SPP	s h	TL (mm)	Wet Wt (g)	M/F/ U	Gonad wt (g)	deformity,	W H O,	M U S	0 T 0	G U T	G O N	B L O	SP	Other
044 093	WAL	Rewi	492	1152	M	9.9	SPA	0	1	1.	0	1	j	0	Lead
045			446	895	m	5.5	SPA	1			Ĭ	-		_	Alive
04,6	(F)		457	967	ш	11.1	SPA								Alie
047	453	Key	小辫	910	m	3.9	SPA		1						Alive
48	125	bh	35142	1796	m	12.4	STA		1				$\dashv$		Alive
49	551	the	°551	1892	m	22.4	SPA			$\prod$		$\top$			Alive
Ś		Wh	460	1118	M	9.3	584			1					Aline
51	- 6		451	959	M	10,4	SPA			1		$\forall$		-	Alive
52			444	814	m	9.0	SPA			1					Aline
53			421	747	m	5.7	SPA						7		Alive
54			409	622	M	3.2	SPA		(	8					Alive
55		=	453	897	F	1.3	IMM/UNDE				1	1	$\dashv$		Aline
S6			476	975	m	7.4	59 N			7	1				Alica
57	Ж	121	421	693	m	4.4	SPA				1		$\dagger$	1	Aline
58			469	1066	M	8.8	SPA				Ť	1	+		Aline
59			514	1487	M	9.2	SPA	$\exists$			+	1	+		Alive
60	П		453	હા છ	m	9.6	SPA				$\dagger$	7		Ğ	Aline
61	₽/		436	702	m	3.9	SPA			$\dagger$	+	1	H	24.1	Aline
62			415	613	烟	0.6	# UNDEV		$\dashv$	$\dagger$	+	0.	7	$\dashv$	don't
63	11	nh	469	1000	m	12.8	SPA	-		$\dashv$	+	+	1	T.	Deal

WHO=whole fish, MUS=muscle plug, OTO=otolith, SPI=spine, GUT=stomach, GON=gonad, BLO=blood WB codes: Narraguinnep=NAR, Jumbo=JUM, Jumbo Annex=JAN; Spp codes: Walleye=WAL, Sauger=SAR

**COMMENTS:** 

Water name Narraguinnep Res. Date 03/20/18 Net type AH Netnum 3 Page Fof
SET: MM/DD 03/20Mil time 14 1/6 LITM 125 02/19 7/18 LICULDO - 1/20
Location/sampling site 1 rap along road 1/150 the Habitat location
LIFT: MM/DD 03/1 Mil time 959 Personnel B Johnson, B Pate, Jim White

SPP		TL (mm)	Wet Wt (g)	Sex M/F/	0	repro condition	L.		"1" denotes that a sample was taken, "0" denotes none										
		1150	Wt (g)	W/F/ U	Gonad wt (g)	Repro condition, deformity, disease	W H O	M U S	0 T 0	GUT	G O N	B L O	S P	Other					
		S-1005 00	891	14	5.5	SPA	0	1	1	0	ī	Ĭ	0						
		496	1279	M	9.7	SPA								Aliva					
11/2	Le	522	1320	M	7.4	SPA SPA			,	-			7	Alive Alive					
~	~	$\sim$	~	~		J799			,										
			01					-											
				3										Y					
						glio I													
÷			1786	E045					,										
2				9A			$\exists$						$\dashv$						
			wii				$\dashv$	1						ni					
		Yes	- i i i i				$\dashv$	1		$\dashv$		1	1						
			18					7	1										
			7				7	+		7	+		1	736					
			- 1				_	+	1	1	+	1	1						
							$\dagger$	+		+	1	1	+						
							1	$\uparrow$	+		$\dagger$	1	+						
							$\dagger$	+	+	$\dagger$	+	+	+						
							+	1	+	+	+	+							
						r'	$\dagger$	$\dagger$	+	-	+	+	+						
		-				77-0	$\dagger$					+	+						
	MUS	MUS=mu	MUS=muscle plur	MUS=muscle plug OTO=c	MUS=muscle plug OTO-otolish S	MUSEmuscle plus OTO-stolish Splansin	MUSEmuscie plug OTO-stolith Spinoin OUT	MUSEmuscle plug OTO-stolish SPI-pain OUT	MUSEmuscle plug OTO-otolith SPI-pain OUT	MUSEmuscle plug OTO-otalith Splaning OUT	MUS=muscle plug OTO-stelith SDI-maio OUT	MUS=muscle plug OTO=otolith SDI-pair OUT	MUS=muscle plug OTO-coolith SPInain OUT						

COMMENTS:

small mesh inshore

Narraguinnep Reservoir State Wildlife Area 03/21/18 ake may come up another 3-5 mfters spring TEMP LOGGER ARRAY before it drops 25 m total, 3 cenest weights WHYPT = set at 125 0709919 4181414 NAR LOGGER Weight bullet float marked + Adam's phone no. depth at station= Narraguinnep Reservoir SWA Boundary Restroom Information Boatramp P Parking 0.5 Miles