

Field Notes for Fish Collections (August 1 2006) from Sanctuary Pond at Prairie Crossing

Jim Bland, and Sandy Kubillus of Integrated Lakes Management collected fish from Sanctuary Pond on August 1, 2006. Fish collection was done with a 20 ft. X 6ft. X 1/8" mesh, common sense seine and a 10ft X 6ft X 1/8" mesh common sense seine. Active fishing proceeded for 30 min. Two hauls were done with the 10 ft. seine and one haul was done with the 20 ft. seine. We collected approximately 350 individuals and measured 214.

The collection consisted of blackchin shiners, blacknose shiners, banded killifish, and Iowa darters. Approximately 20 "unidentified" fry which were 2 cm or less were also collected. No "pugnose shiners" were identified this collection.

Previous sampling notes have commented on a golden hue associated with large size (5 cm.) blackchin shiners. As far as we know this has not been reported in the literature. A photograph was taken to document the coloration. This display could be a result of breeding activities. In conjunction with numerous unidentifiable shiners within the 1-2 cm range, it's quite possible that these highly sensitive species with short life spans experience multiple breeding seasons within one fiscal year.

Length/frequency data accompany these field notes. All four populations of state endangered and threatened species continue to sustain populations at the site. Collection and reporting techniques still have the potential to exert substantial biases to fish population numbers. Previous collections have been dominated by banded killifish. Blacknose shiners and Iowa darters have always made up a smaller proportion of the population.



Yellow cast to large size (> 5 cm) blackchin shiners. Not all large size shiners display this hue. The possibility exists that this represents breeding colors for males. Out of a sampled population of 126 shiners approximately 5 had this distinctive coloration. More typical coloration is also shown for comparative purposes.



INTEGRATED LAKES MANAGEMENT

Fish Distribution for Sanctuary Pond August 1, 2006

Fish Collection Form

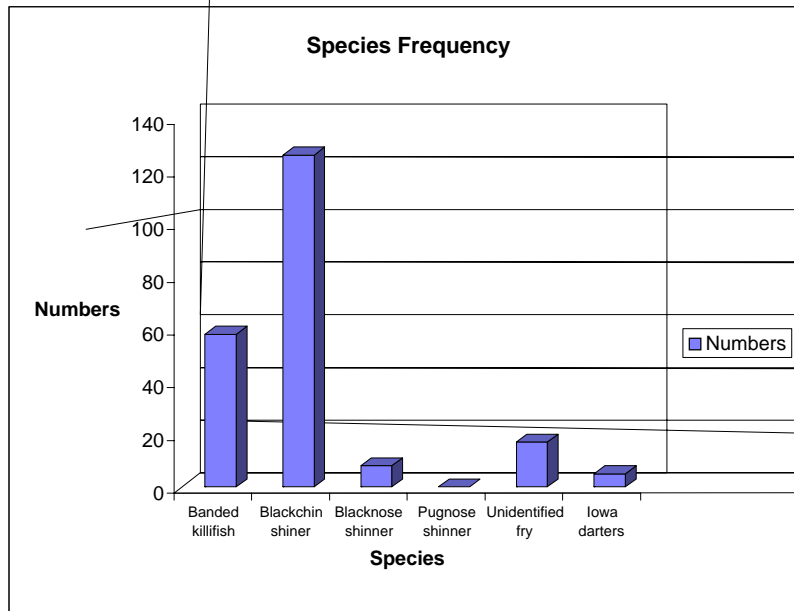
Date: 1-Aug-06 **Crew:** J. Bland
Time: 8:00 AM to 10:00 AM S. Kubillus

Locality: Prairie Crossing
Site Name: Sanctuary pond (Upper Pond)
Station Name: S.W. Corner (Station No. 1)

Gear: 20' x 6' x 1/8" Mesh Common Sense Sein
Duration: 30 minutes for total collection; all species

Station Description;
N42.33364 W088.01375

Species	Numbers	Percentage
Banded killifish	58	0.27
Blackchin shiner	126	0.43
Blacknose shinner	8	0.11
Pugnose shinner	0	0.02
Unidentified fry	17	0.08
Iowa darters	5	0.00
Total	214	

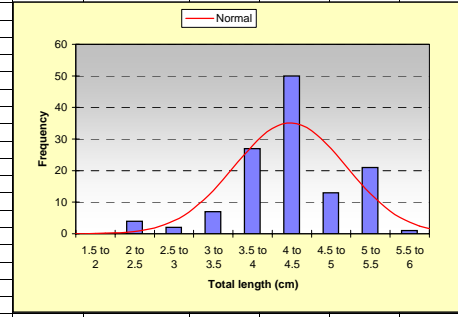


INTEGRATED LAKES MANAGEMENT **Blackchin Shiner Frequency Distribution for August 1, 2006**

Fish Collection Form		Locality: Prairie Crossing	
Date: 1-Aug-06	Crew: J. Bland	Site Name: Sanctuary pond (Upper Pond)	
Time: 8:00 AM to 10:00 AM	S. Kubillus	Station Name: S.W. Corner (Station No. 1)	
Gear: 20' x 6' x 1/8" Mesh Common Sense Sein 10 ft.X 6 ft.X 1/8" Common Sense Seine			
Sample Duration: 30 minutes for total collection; all species 2 passes with 10 ft.; one pass with 20 ft.		Station Description: N42.33364 W088.01375	

Species	Number	Total length (cm)	Descriptive Statistics	
Blackchin shinner	1	4.8		
	2	5.6		
	3	4.7		
	4	4.4		
	5	3.8		
	6	3.8		
	7	4		
	8	3.9		
	9	3.2		
	10	3.2		
	11	3.8		
	12	3.5		
	13	3.4		
	0	5		
	15	3.5		
	16	4.3		
	17	3.8		
	18	4.2		
	19	4		
	20	3.9		
	21	4.2		
	22	2.2		
	23	3.5		
	24	3.8		
	25	2.4		
	26	3.8		
	27	4		
	28	4		
	29	3.8		
	30	5		
	31	3.5		
	32	4.5		
	33	4.5		
	34	4.2		
	35	5.4		
	36	4.2		
	37	4		
	38	3.8		
	39	4.2		
	40	4.3		
	41	3.8		
	42	5		
	43	5.4		
	44	4.3		
	45	4.2		
	46	4.5		
	47	5		
	48	4.2		
	49	4.8		
	50	3.8		
	51	3.8		
	52	4		
	53	3.8		
	54	3.8		
	55	4		
	56	3.8		
	57	4.2		
	58	3.7		

Total length (cm)	Frequency	Percent	Cumulative Percent
1.5 to 2	0	0.00	0.00
2 to 2.5	4	3.20	3.20
2.5 to 3	2	1.60	4.80
3 to 3.5	7	5.60	10.40
3.5 to 4	27	21.60	32.00
4 to 4.5	50	40.00	72.00
4.5 to 5	13	10.40	82.40
5 to 5.5	21	16.80	99.20
5.5 to 6	1	0.80	100.00



INTEGRATED LAKES MANAGEMENT

Blacknose Shiner Frequency Distribution for August 1, 2006

Fish Collection Form

<p>Date: 1-Aug-06 Time: 8:00 AM to 10:00 AM</p> <p>Gear: 20' x 6' x 1/8" Mesh Common Sense Sein 10 ft.X 6 ft.X 1/8" Common Sense Seine</p> <p>Sample Duration: 30 minutes for total collection; all species 2 passes with 10 ft.; one pass with 20 ft.</p>	<p>Crew: J. Bland S. Kubillus</p>	<p>Locality: Prairie Crossing Site Name: Sanctuary pond (Upper Pond) Station Name: S.W. Corner (Station No. 1)</p> <p>Station Description; N42.33364 W088.01375</p>
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Blacknose Shiner

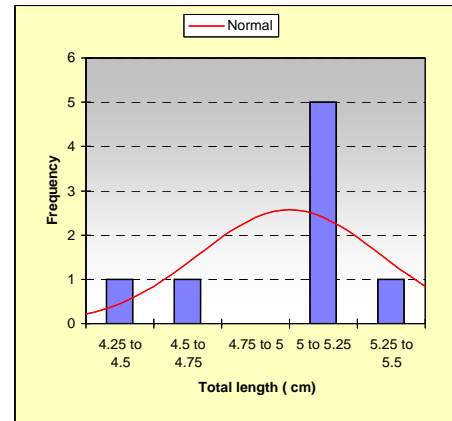
Number	Total length (cm)
1	5.4
2	5.0
3	5.0
4	5.0
5	5.0
6	4.7
7	5.2
8	4.4

Descriptive Statistics

	Total length (cm)
Valid cases	58
Mean	4.082758621
Std. error of mean	0.155366552
Variance	1.400048397
Std. Deviation	1.183236408
Variation Coefficient	0.289812972
rel. V.coefficient(%)	3.805430749
Skew	-0.554203221
Kurtosis	-1.019920583
Minimum	1.5
Maximum	5.6
Range	4.1
Sum	236.8
1st percentile	----
5th percentile	2
10th percentile	2.18
25th percentile	3.2
Median	4.55
75th percentile	5
90th percentile	5.4
95th percentile	5.405
99th percentile	----
Geom. mean	3.88120358

Frequencies

Total length (cm)	Frequency	Percent	Cumulative Percent
4.25 to 4.5	1	12.50	12.50
4.5 to 4.75	1	12.50	25.00
4.75 to 5	0	0.00	25.00
5 to 5.25	5	62.50	87.50
5.25 to 5.5	1	12.50	100.00



INTEGRATED LAKES MANAGEMENT

Banded Killifish Frequency Distribution for August 1, 2006

Fish Collection Form

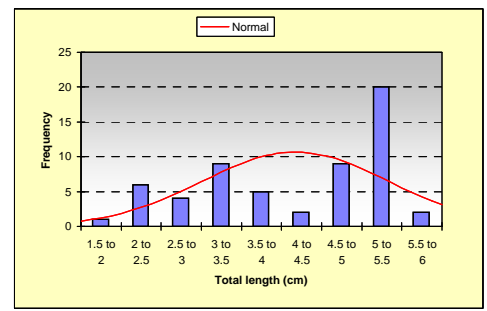
Date: 1-Aug-06	Crew: J. Bland	Locality: Prairie Crossing
Time: 8:00 AM to 10:00 AM	S. Kubillus	Site Name: Sanctuary pond (Upper Pond
Gear: 20' x 6' x 1/8" Mesh Common Sense Seir 10 ft.X 6 ft.X 1/8" Common Sense Seine		Station Name: S.W. Corner (Station No. 1)
Sample Duration: 30 minutes for total collection; all species: 2 passes with 10 ft.; one pass with 20 ft		Station Description: N42.33364
		W088.01375

Species	Number	Total length (cm)
Banded killifish	1	5.2
	2	3.2
	3	3.2
	4	2
	5	2
	6	3.6
	7	5.4
	8	4.6
	9	4.3
	10	4.8
	11	4.8
	12	5
	13	4.8
	14	3.2
	15	5
	16	3.2
	17	5.6
	18	5
	19	5.2
	20	4.5
	21	4.4
	22	2.2
	23	2.4
	24	5.5
	25	3.2
	26	3.2
	27	5.2
	28	4.5
	29	5.3
	30	5
	31	5
	32	5
	33	3.5
	34	3
	35	3
	36	2.9
	37	5.4
	38	5
	39	2.5
	40	5
	41	5.2
	42	3.8
	43	5.4
	44	4.8
	45	5
	46	3.8
	47	5.2
	48	4.8
	49	4.8
	50	3.8
	51	5.3
	52	5.4
	53	3.2
	54	2
	55	2.5
	56	2
	57	1.5
	58	2.5

Total length (cm)	Frequency	Percent	Cumulative
1.5 to 2	1	1.72	1.72
2 to 2.5	6	10.34	12.07
2.5 to 3	4	6.90	18.97
3 to 3.5	9	15.52	34.48
3.5 to 4	5	8.62	43.10
4 to 4.5	2	3.45	46.55
4.5 to 5	9	15.52	62.07
5 to 5.5	20	34.48	96.55
5.5 to 6	2	3.45	100.00

Statistics

Statistics	Total length
Valid cases	58
Mean	4.082758621
Std. error of	0.155366552
Variance	1.400048397
Std. Deviation	1.183236408
Variation	0.289812972
rel.	3.805430749
Skew	-0.554203221
Kurtosis	-1.019920583
Minimum	1.5
Maximum	5.6
Range	4.1
Sum	236.8
1st percentile	---
5th percentile	2
10th percentile	2.18
25th percentile	3.2
Median	4.55
75th percentile	5
90th percentile	5.4
95th percentile	5.405
99th percentile	---
Geom. mean	3.88120358



INTEGRATED LAKES MANAGEMENT

Iowa Darter Frequency Distribution for August 1, 2006

Fish Collection Form

Date: 1-Aug-06
Time: 8:00 AM to 10:00 AM

Crew: J. Bland
S. Kubillus

Locality: Prairie Crossing

Site Name:
Station Name:

Sanctuary pond (Upper Pond)
S.W. Corner (Station No. 1)

Gear: 20' x 6' x 1/8" Mesh Common Sense Seiner
10 ft.X 6 ft.X 1/8" Common Sense Seine

Duration: 30 minutes for total collection; all species
2 passes with 10 ft.; one pass with 20 ft.

Station Description:
N42.33364

W088.01375

Iowa Darters	number	Total Length (cm)
	1	4
	2	3.8
	3	4
	4	4.2
	5	4.4

Descriptive Statistics

	Total Length (cm)
Valid cases	5
Mean	4.08
Std. error of mean	0.10198039
Variance	0.052
Std. Deviation	0.228035085
Variation Coefficient	0.055890952
rel. V.coefficient(%)	2.499519369
Skew	0.379496258
Kurtosis	0.055658284
Minimum	3.8
Maximum	

INTEGRATED LAKES MANAGEMENT

Unidentified Fry Frequency Distribution for August 1, 2006

Fish Collection Form

Date: July 31 2006	Crew: J. Bland	Locality: Prairie Crossing
Time: 8:00 AM to 10:00 AM	S. Kubillus	Site Name: Sanctuary pond (Upper Pond)
Gear: 20' x 6' x 1/8" Mesh Common Sense Sein 10 ft.X 6 ft.X 1/8" Common Sense Seine		Station Name: S.W. Corner (Station No. 1)
Sample Duration: 30 minutes for total collection; all species 2 passes with 10 ft.; one pass with 20 ft.		Station Description; N42.33364 W088.01375

Unidentified fry	Number	Total length(cm)
	1	1.8
	2	2.2
	3	1.8
	4	2.3
	5	1.5
	6	1
	7	1.5
	8	2.2
	9	1.5
	10	1.5
	11	1.5
	12	2
	13	1.5
	14	2
	15	2
	16	2
	17	1

Descriptive Statistics

	Total length(cm)
Valid cases	17
Mean	1.723529412
Std. error of mean	0.094918468
Variance	0.153161765
Std. Deviation	0.391358869
Variation Coefficient	0.227068286
rel. V.coefficient(%)	5.507214868
Skew	-0.389859503
Kurtosis	-0.443354416
Minimum	1
Maximum	2.3
Range	1.3
Sum	29.3
1st percentile	----
5th percentile	----
10th percentile	1
25th percentile	1.5
Median	1.8
75th percentile	2
90th percentile	2.22
95th percentile	----
99th percentile	----
Geom. mean	1.677164387

Frequencies

Total length(cm)	Frequency	Percent	Cumulative Percent
1 to 1.25	2	11.76	11.76
1.25 to 1.5	0	0.00	11.76
1.5 to 1.75	6	35.29	47.06
1.75 to 2	2	11.76	58.82
2 to 2.25	6	35.29	94.12
2.25 to 2.5	1	5.88	100.00

