

Confusing Wisconsin Minnows Field Key

Containing species found within the Headwaters basin

Compiled by Jim Klosiewski/WDNR
Original photos by Konrad Schmidt, modified by Jim Klosiewski
Text by John Lyons/WDNR

Confusing Wisconsin Minnows (Headwaters basin)

A1 **Mimic shiner** *Notropis volucellus* statewide; sporadic in south lakes in S, lakes & rivers in N

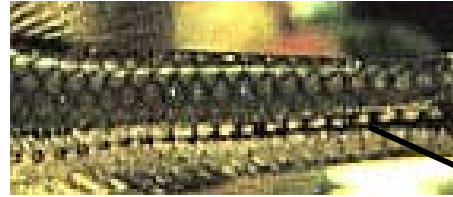


- usually 8 anal rays
- 4 - 4 teeth
- anterior l.l. scales elevated
- usually well pigmented
- dark pigment spot above and below l.l. pores

A2 **Sand shiner** *N. stramineus* (*N. ludibundus*) statewide; sporadic in north variable habitat



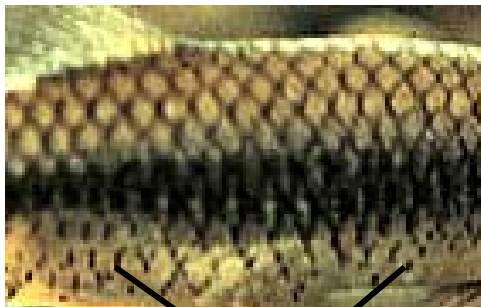
- usually 7 anal rays
- 4 - 4 teeth
- anterior l.l. scales not elevated
- dark pigment spots abv & blw l.l. pores yielding a "railroad track" appearance



A3 **Bigmouth shiner** *N. doralis* statewide (except Lake Superior basin); sporadic in N sandy streams

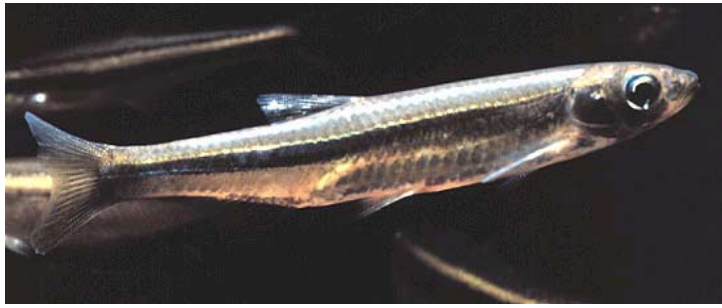


- 8 anal rays
- 1, 4-4, 1teeth
- anterior scales l.l. not elevated
- horizontal mouth
- length of upper jaw greater than eye diameter
- dark pigment spots abv and blw l.l. pores



Confusing Wisconsin Minnows (Headwaters basin)

B1 **Emerald shiner** *N. atherinoides* statewide large lakes and large (pool species)

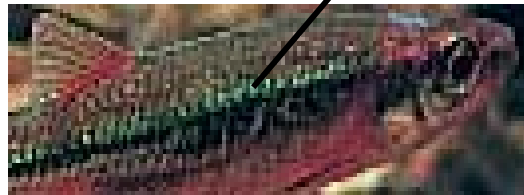


- 10 – 13 anal rays
- snout rounded
- body silvery with blue-green to green on back, iridescent
- never pink on body
- middle of chin speckled with dark pigment

B2 **Rosyface shiner** *N. rubellus* statewide (except Lake Superior basin) large streams; small-med. Rivers (run species)



- 10 – 13 anal rays
- snout more pointed than in emerald shiner
- orange to orange-red on face of breeding males
- usually little dark pigment on middle of chin
- beadlike iridescent emerald line running length of body above l.l. in breeding males

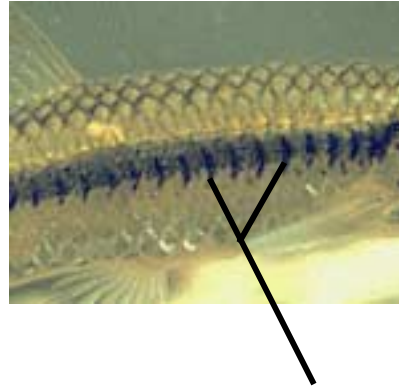


Confusing Wisconsin Minnows (Headwaters basin)

C1 **Blacknose shiner** *N. heterolepis* statewide lakes & slow moving streams, usually in vegetation



- 8 anal rays
- snout rounded, mouth inferior
- no black pigment on chin
- vertical crescents on l.l. scales
- 4-4 teeth



C2 **Blackchin shiner** *N. heterodon* statewide, but absent from most of SW Lakes & slow moving streams, usu. in vegetation



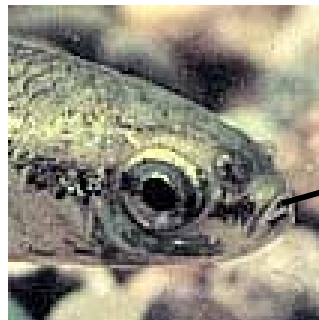
- 8 anal rays
- mouth terminal, oblique (app. 45° angle)
- chin with black pigment
- usually 1,4-4,1 teeth; rarely 4-4



C3 **Pugnose shiner** *N. anogenus* (Threatened) mainly SE & N lakes & slow moving streams, almost always in vegetation



- 8 anal rays
- mouth very small and almost vertical, shorter than the eye
- 4 - 4 teeth
- lateral stripe starting from wedged shaped spot on base of caudal fin running through the eye and abruptly terminating close to side of mouth



Confusing Wisconsin Minnows (Headwaters basin)

D1 **Common shiner** *Luxilus cornutus* (formerly *Notropis*) statewide small streams to small rivers, lakes

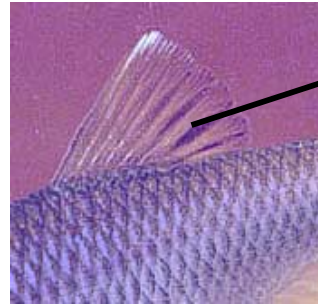


- greatly elevated l.l. scales, diamond shaped
- 9-10 anal rays
- deep body

D2 **Spotfin shiner** *Cyprinella spiloptera* (formerly *Notropis*) Statewide (except Lake Superior basin) sporadic in the N med-large rivers



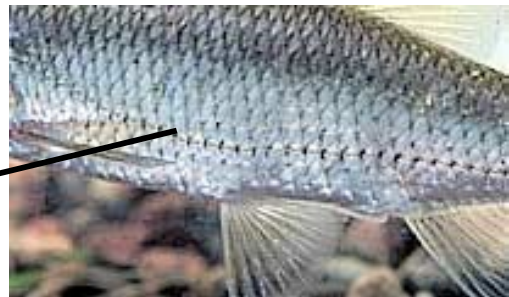
- no lines on back
- l.l. scales not elevated, diamond shaped
- 8 anal rays
- dark blotch on posterior part of dorsal fin (only a few speckles of pigment in small specimens)



D3 **Golden shiner** *Notemigonus crysoleucas* statewide slow moving streams, weedy lakes



- no lines on back
- golden color
- 11 – 14 anal rays
- l.l. scales not elevated
- strongly decurved lateral line
- fleshy keel in front of anal fin
- juveniles often with dusky lateral band



E1 **Brassy minnow** *Hybognathus hankinsoni* statewide small to med slow moving streams; often in bogs in N



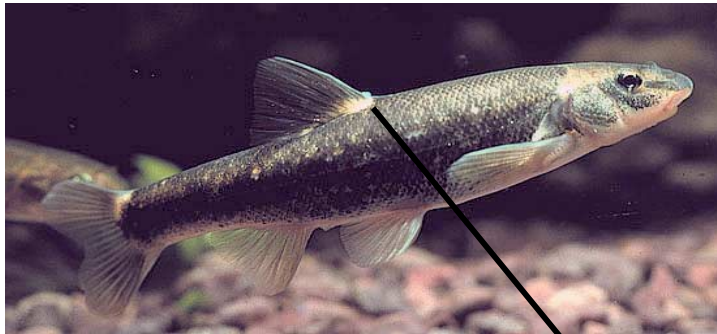
- brassy!
- 8 anal rays
- dorsal fin rounded
- 4-4 teeth
- tightly coiled gut with black peritoneum

F1 **Largescale stoneroller** *Campostoma oligolepis* statewide (except Lake Superior basin); sporadic in south small-med streams



- cartilaginous ridge on lower jaw
- l.l. scales usually 43-47
- circumferential scales 39-46

F2 **Longnose dace** *Rhinichthys cataractae* statewide streams, small rivers in riffles; wave-swept shores of Great lakes



- fleshy lower lip
- upper lip connected to snout by bridge of tissue
- barbels at corners of mouth
- snout projects well over mouth
- elongated body
- light colored saddle, front end of dorsal fin



F3 **Blacknose dace** *R. atratulus* statewide streams, small rivers in riffles and runs

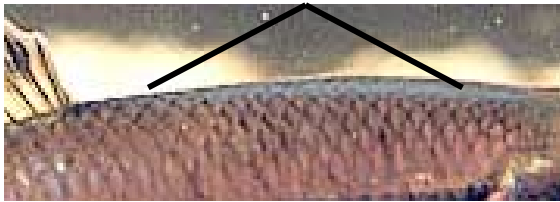


- fleshy lower lip
- upper lip not separate from snout
- barbels at corners of mouth
- snout barely projects over mouth
- chunky body

G1 **Bluntnose minnow** *Pimephales notatus* statewide streams, small rivers and lakes; occasionally in large rivers



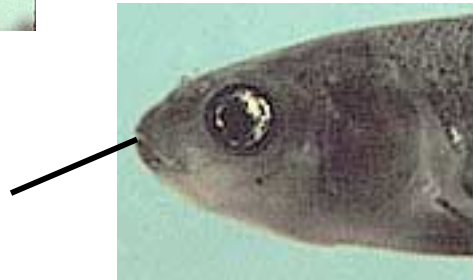
- 7 anal rays
- small crowded scales in front of dorsal fin
- rounded snout and underslung mouth
- moderately long digestive tract
- black peritoneum
- round body shape in cross section



G2 **Fathead minnow** *P. promelas* statewide most common in small sluggish streams, weedy lakes; common bait minnow; can show up anywhere



- 7 anal rays
- small crowded scales in front of dorsal fin
- small upturned mouth
- long digestive tract
- black peritoneum
- ovoid body shape in cross section

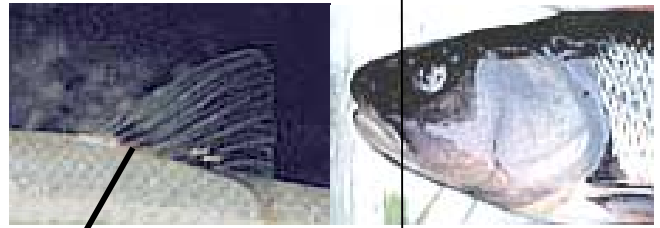


Confusing Wisconsin Minnows (Headwaters basin)

H1 **Creek chub** *Semotilus atromaculatus* statewide streams, small rivers



- 8 anal rays
- large mouth, extends beyond front of eye
- 50-60 l.l. scales
- l.l. scales small & crowded near head
- often dark pigment at anterior base of dorsal fin
- teeth 2,5-4,2



H2 **Pearl dace** *Margariscus margarita* (formerly *Semotilus*) statewide, sporadic in S sluggish streams, beaver ponds, boggy lakes



- 8 anal rays
- small mouth, ends before eye
- 65-75 l.l. scales
- often mottled by specialized dark scales on side
- teeth 2,5-4,2
- may have pink cast

specialized dark scales



H3 **Hornyhead chub** *Nocomis biguttatus* statewide med-large streams, small rivers



- 7 anal rays
- medium mouth, extends almost to eye
- < 50 l.l. scales
- barbel in corner of mouth
- l.l. scales not substantially smaller or crowded near head
- often dark caudal spot
- reddish ear spot, breeding males
- teeth usually 1,4-4,1
- tail usually red, especially in smaller specimens

H4 **Redside dace** *Clinostomus elongatus* sporadic in S. 2/3 of WI; most common in central WI streams, small rivers



- usually 9 anal rays
- very large upturned mouth, extends to back of eye
- 60-75 l.l. scales
- usually red stripe on side
- teeth 2,5-4,2

Confusing Wisconsin Minnows (Headwaters basin)

H5 **Lake chub** *Coesius plumbeus* Great Lakes shorelines, a few Lake Superior tributaries shorelines near tributaries, small streams



- medium mouth, extends almost to eye
- > 60 l.l. scales
- barbel in corner of mouth
- teeth 2,4-4,2
- pointed dorsal fin

H6 **Finescale dace** *Phoxinus neogaeus* Northern part of state sluggish streams, beaver ponds, boggy lakes



- medium mouth extends almost to eye
- >70 l.l.
- dark back, one dark lateral stripe
- teeth 2,4-4,2
- rounded dorsal fin
- scales; small and hard to see



H7 **Northern redbelly dace** *P. eos* mainly N; sporadic in S sluggish streams, beaver ponds, boggy lakes



- small, upturned mouth (about 50° w/horizontal axis)
- lower lip slightly forward of upper lip
- usually >70 l.l. scales; small & hard to see
- 2 lateral stripes on side
- teeth 2,5-4,2

