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AN INTERGENERIC CYPRINID HYBRID, *NOCOMIS PLATYRHYNCHUS* × *NOTROPIS CHRYSOCEPHALUS*, FROM THE GREENBRIER RIVER DRAINAGE IN WEST VIRGINIA.—One intergeneric hybrid of the Cyprinidae, *Nocomis platyrhynchus* × *Notropis chrysocephalus*, was taken in recent surveys of the Greenbrier River drainage in West Virginia. Preliminary information relative to these surveys was presented in Denoncourt, Hocutt and Stauffer (1975). No reference to this hybrid combination is given in the literature, although both intergeneric and intrageneric hybridization is well known for both species (Gilbert, 1964; Schwartz, 1972). The use of *Nocomis* nests by other cyprinids as spawning habitat is also well documented (Raney, 1947).

Collections of fishes were made in the Greenbrier River drainage in 1972 and 1974 by seines and D.C. electroshocker. The hybrid was taken in the main channel, Greenbrier R., below the Route 3 bridge at Alderson, West Virginia, in August, 1974, and deposited in the Appalachian Environmental Laboratory Fish Museum, University of Maryland at Frostburg, Maryland.

Ten adult specimens of *Nocomis platyrhynchus* and ten of *Notropis chrysocephalus* were selected for comparison of 24 characters with the hybrid. Morphometric characters were measured to the nearest 0.1 mm with dial calipers. Methods given in Hubbs and Lagler (1958) and Raney and Suttkus (1964) were followed. The averages for each parent were compared with the hybrid. A hybrid index was calculated following Hubbs, Hubbs and Johnson (1943): $H = (X_H - u_1/u_2 -$

TABLE 1. COMPARISON OF THE INTERGENERIC HYBRID, *Nocomis platyrhynchus* × *Notropis chrysocephalus* FROM THE GREENBRIER RIVER IN WEST VIRGINIA WITH PARENT SPECIES.

Character	*platyrhynchus* (n = 10) Range	*platyrhynchus* (n = 10) $\bar{x}$	Hybrid (n = 1)	*chrysocephalus* (n = 10) $\bar{x}$	*chrysocephalus* (n = 10) Range	Hybrid Index
Standard length, mm	76–104	84.8	101	86.7	77–102	–
Lateral line scale	39–42	40.9	41	39.9	39–41	*
Scales above L.L.	7	7.0	6	6.3	6–7	**
Scales below L.L.	5–6	5.2	5	4.9	4–5	67
Lease caudal peduncle scales	16–18	16.2	16	15.9	15–16	67
Anal rays	7	7.0	8	8.9	8–9	53
Thousands of Std. Length						
Head length	256–281	272.0	257	246.4	234–267	59
Eye length	54–62	58.3	62	64.7	56–70	58
Snout length	106–118	110.7	97	79.5	74–82	44
Posterior head length	113–133	124.3	117	115.5	110–121	83
Head depth	151–166	157.2	160	163.7	155–173	43
Body depth	200–222	213.8	225	236.4	217–249	50
Head width	139–145	142.6	128	126.1	118–131	88
Snout to dorsal	503–527	514.9	485	474.7	466–490	74
Snout to pelvic	487–519	503.5	485	462.5	452–482	45
Caudal peduncle length	222–252	239.6	242	240.0	219–251	*
Thousands of Head Length						
Eye length	195–240	214.7	240	262.5	238–297	53
Snout length	381–428	407.3	376	321.4	297–350	36
Head length	547–615	577.9	620	665.0	644–720	48
Eye/post head length	427–545	472.6	528	560.4	491–633	63
Snout/head depth	659–871	739.0	605	481.7	449–503	52
Snout/body depth	488–553	518.5	430	334.1	312–355	48
Eye/snout	487–578	527.6	640	816.3	707–934	39
Barbels	1+1	2	1	0	0+0	50
Scales along lat. line	round		inter		high	50

* Hybrid value greater than the mean for either parent.
** Hybrid value lower than the mean for either parent.

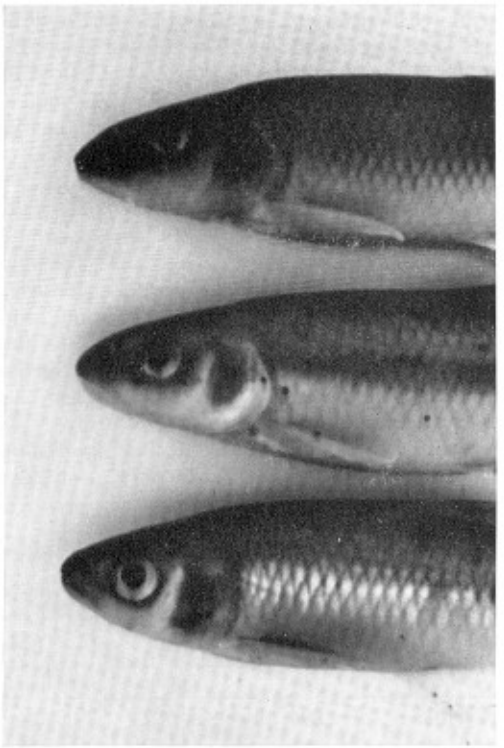

Fig. 1. Lateral view (top to bottom) of *Nocomis platyrhynchus*, the hybrid and *Notropis chrysocephalus*.

$u_1) \times 100$, where H = hybrid index, X_H = hybrid value, u_1 = value for *platyrhynchus* and u_2 = value for *chrysocephalus*.

Table 1 summarizes data for 24 morphometric and meristic characters. Hybrid indices are intermediate (40–60) for 13 characters, closer to *Nocomis platyrhynchus* in two characters and closer to *Notropis chrysocephalus* in six characters. Scales above the lateral line were slightly less in number than the mean from either parental species, and the caudal peduncle length and lateral line scales were slightly greater. None of the extreme characters were outside the range of both parental species.

The overall appearance (Fig. 1) of the hybrid is clearly a mixture of the parental types. Squamation pattern and size of scales suggest *N. chrysocephalus*. Scales along lateral lines are intermediate in height, while the typical dorsolateral pigmentation lines of *N. chrysocephalus* are present (Gilbert, 1964). A more acute snout tip, nearly horizontal mouth and barbel on the left side strongly resemble *N. platyrhynchus*. A dark lateral strip about 6.4 mm wide extends from the upper opercle to the caudal rays. The mean hybrid index, exclusive of lateral line scales, scales above the lateral line and caudal peduncle length, is 55.7.

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