

Table V-4-4. Family-species codes used by Ohio EPA fish field crews to code fish data sheets and for data entry into the Fish Information System (FINS).

FISH INFORMATION SYSTEM (FINS) FAMILY CODES	
Family	Code
Petromyzonidae	01
Polyodontidae	04
Acipenseridae	08
Lepisosteidae	10
Amiidae	15
Hiodontidae	18
Clupeidae	20
Salmonidae	25
Osmeridae	30
Umbridae	34
Esocidae	37
Catostomidae	40
Cyprinidae	43
Ictaluridae	47
Anguillidae	50
Cyprinodontidae	54
Poeciliidae	57
Gadidae	60
Percopsidae	63
Aphredoderidae	68
Atherinidae	70
Percichthyidae	74
Centrarchidae	77
Percidae	80
Sciaenidae	85
Cottidae	90
Gasterosteidae	95

Procedure No. WQPA-SWS-3
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Date Issued 9-30-89
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Figure V-4-8. Data entry format used to enter raw fish relative abundance into the Fish Information System (FINS). The example below is data collected on September 9, 1984 in the Scioto R. at river mile 125.6. Species 43-001 includes 34 individuals from which a subsample of 15 were individually weighed. Species 43-043 includes 356 individuals of which a subsample of 54 individuals were collectively or "mass" weighed. Anomalies were recorded from the weighed subsample only.

DATE	09/09/84	DEPTH (CM)	120	PURPOSE	01	INVALID SAMPLE	N
RIV CODE	02-001	DATA SOURCE	01	LATITUDE	39 54 03	DESIGNATION	01
RIV MILE	125.6	STREAM ORDER	6	LONGITUDE	83 00 01	FLOW CFS	345
DISTANCE	0.5	TIME (SEC)	1587	DRAIN. AREA	4500	TEMPERATURE	26.8
SAMPLER TYPE	A	OBSERVED FLOW	C	GRADIENT	4.5	DISS. OXYGEN	5.8

NUMBER OF SPECIES 12

ANOMALIES (Y or N?) Y

FAMILY-SPECIES CODE 43-001-C
 WEIGHT (GRAMS)

NUMBER WEIGHED 15 TOTAL COUNT 34
 ANOMALIES

<u>2350</u>	<u>4550</u>	<u>3450</u>	<u>2000</u>	<u>1225</u>	<u>A</u>	<u>L</u>	<u>P</u>	___	___	___
<u>985</u>	<u>634</u>	<u>5800</u>	<u>1250</u>	<u>1300</u>	<u>2</u>	<u>4</u>	<u>1</u>	___	___	___
<u>2300</u>	<u>3400</u>	<u>230</u>	<u>3250</u>	<u>5700</u>						

FAMILY-SPECIES CODE 43-043-C
 WEIGHT (GRAMS)

NUMBER WEIGHED 54 TOTAL COUNT 356
 ANOMALIES

<u>2345</u>	BL	E	___	___	___	___
	12	3	___	___	___	___

(additional weight and anomalies spaces would follow for the remaining 10 species)

Procedure No. WOPA-SWS-3Date Issued 9-30-89Revision No. 6Date Effective 9-30-89

Table V-4-5. Family-species codes used by Ohio EPA fish field crews to code fish data sheets and for data entry into the Fish Information System (FINS). Designation of Ohio fish species for the purposes of the Index of Biotic Integrity, the Modified Index of Well-Being (Iwb), and the Fish Information System (FINS). Explanation of column headings appears at the end of the table.

FINS Code	Species	Spc Grp	Feed Guild	TOL	IBI Grp	Riv Size	Brd Gld	Hab Pref	Family
01001	Silver lamprey	O	P	-	-	L	N	B	Petromyzontidae
01002	Northern brook lamprey	O	F	R	-	-	N	P	Petromyzontidae
01003	Ohio lamprey	O	P	S	-	-	N	B	Petromyzontidae
01004	Mountain brook lamprey	O	F	S	-	-	N	P	Petromyzontidae
01005	Sea lamprey	O	P	-	E	-	N	B	Petromyzontidae
01006	Least brook lamprey	O	F	-	-	H	N	P	Petromyzontidae
01007	American brook lamprey	O	F	R	-	H	N	P	Petromyzontidae
04001	Paddlefish	O	F	S	-	L	S	B	Polyodontidae
08001	Lake sturgeon	O	V	-	-	L	S	B	Acipenseridae
08002	Shovelnose sturgeon	O	I	-	-	L	S	P	Acipenseridae
10001	Alligator gar	L	P	-	-	L	M	P	Lepisosteidae
10002	Shortnose gar	L	P	-	-	L	M	P	Lepisosteidae
10003	Spotted gar	L	P	-	-	L	M	P	Lepisosteidae
10004	Longnose gar	L	P	-	-	L	M	P	Lepisosteidae
15001	Bowfin	O	P	-	-	-	C	P	Amiidae
18001	Goldeye	W	I	R	-	L	M	B	Hiodontidae
18002	Mooneye	W	I	R	-	L	M	B	Hiodontidae
20001	Skipjack herring	W	P	-	-	L	M	B	Clupeidae
20002	Alewife	O	-	-	E	-	M	P	Clupeidae
20003	Gizzard shad	GS	O	-	-	-	M	P	Clupeidae
20004	Threadfin shad	GS	O	-	-	L	M	P	Clupeidae
25001	Brown trout	SA	-	-	E	-	N	B	Salmonidae
25002	Rainbow trout	SA	-	-	E	-	N	B	Salmonidae
25003	Brook trout	SA	-	-	-	-	N	B	Salmonidae
25004	Lake trout	SA	P	-	F	-	N	P	Salmonidae
25005	Coho salmon	SA	-	-	E	-	N	P	Salmonidae
25006	Chinook salmon	SA	-	-	E	-	N	P	Salmonidae
25007	Cisco or Lake Herring	WF	-	-	-	-	M	P	Salmonidae
25008	Lake whitefish	WF	V	-	-	-	M	P	Salmonidae
30001	Rainbow smelt	O	-	-	-	-	M	P	Osmeridae
34001	Central mudminnow	T	I	T	-	-	C	P	Umbridae
37001	Grass pickerel	P	P	P	-	-	M	P	Esocidae
37002	Chain pickerel	P	P	-	F	-	M	P	Esocidae
37003	Northern pike	P	P	-	F	-	M	P	Esocidae
37004	Muskellunge	P	P	-	F	-	M	P	Esocidae
37005	N. Pike x Muskellunge	P	P	-	E	-	-	-	Esocidae
37006	Grass P. x Chain	P.	P	P.	F	-	-	-	Esocidae
40001	Blue sucker	R	I	R	R	L	S	R	Catostomidae
40002	Bigmouth buffalo	C	I	-	C	L	M	P	Catostomidae
40003	Black buffalo	C	I	-	C	L	M	P	Catostomidae
40004	Smallmouth buffalo	C	I	-	C	L	M	P	Catostomidae
40005	Quillback	C	O	-	C	-	M	P	Catostomidae
40006	River carpsucker	C	O	-	C	L	M	P	Catostomidae

Procedure No. WQPA-SWS-3Date Issued 9-30-89Revision No. 6Date Effective 9-30-89

Table V-4-5. Continued

FINS Code	Species	Spc Grp	Feed Guild	TOL	IBI Grp	Riv Size	Brd Gld	Hab Pref	Family
40007	Highfin carpsucker	C	O	-	C	L	M	P	Catostomidae
40008	Silver redhorse	R	I	M	R	-	S	P	Catostomidae
40009	Black redhorse	R	I	I	R	-	S	P	Catostomidae
40010	Golden redhorse	R	I	M	R	-	S	P	Catostomidae
40011	Shorthead redhorse	R	I	M	R	-	S	P	Catostomidae
40012	Greater redhorse	R	I	R	R	-	S	P	Catostomidae
40013	River redhorse	R	I	I	R	-	S	P	Catostomidae
40014	Harelip sucker	R	-	S	R	-	S	P	Catostomidae
40015	Northern hog sucker	R	I	M	R	-	S	R	Catostomidae
40016	White sucker	R	O	T	W	-	S	B	Catostomidae
40017	Longnose sucker	R	I	-	R	-	S	P	Catostomidae
40018	Spotted sucker	R	I	-	R	-	S	P	Catostomidae
40019	Lake chubsucker	R	I	-	R	-	M	P	Catostomidae
40020	Creek chubsucker	R	I	-	R	P	M	P	Catostomidae
43001	Common carp	G	O	T	G	-	M	P	Cyprinidae
43002	Goldfish	G	O	T	G	-	M	P	Cyprinidae
43003	Golden shiner	N	I	T	N	-	M	P	Cyprinidae
43004	Hornyhead chub	M	I	I	N	-	N	B	Cyprinidae
43005	River chub	M	I	I	N	-	N	B	Cyprinidae
43006	Silver chub	M	I	-	N	L	M	P	Cyprinidae
43007	Bigeye chub	M	I	I	N	-	S	R	Cyprinidae
43008	Streamline chub	M	I	R	N	L	S	R	Cyprinidae
43009	Gravel chub	M	I	M	N	L	S	R	Cyprinidae
43010	Speckled chub	M	I	S	N	L	M	R	Cyprinidae
43011	Blacknose dace	M	G	T	N	H	S	R	Cyprinidae
43012	Longnose dace	M	I	R	N	-	S	R	Cyprinidae
43013	Creek chub	M	G	T	N	P	N	B	Cyprinidae
43014	Tonguetied minnow	M	I	S	N	-	N	P	Cyprinidae
43015	Suckermouth minnow	M	I	-	N	-	S	R	Cyprinidae
43016	Southern redbelly dace	M	H	-	N	H	S	B	Cyprinidae
43017	Redside dace	M	I	I	N	H	S	P	Cyprinidae
43018	Rosyside dace	M	I	S	N	H	S	P	Cyprinidae
43019	Pugnose minnow	N	I	R	N	-	M	P	Cyprinidae
43020	Emerald shiner	N	I	-	N	-	S	P	Cyprinidae
43021	Silver shiner	N	I	I	N	-	S	P	Cyprinidae
43022	Rosyface shiner	N	I	I	N	-	S	R	Cyprinidae
43023	Redfin shiner	N	I	-	N	-	N	P	Cyprinidae
43024	Rosefin shiner	N	I	M	N	-	S	P	Cyprinidae
43025	Striped shiner	N	I	-	N	-	S	B	Cyprinidae
43026	Common shiner	N	I	-	N	-	S	P	Cyprinidae
43027	River shiner	N	I	-	N	L	S	P	Cyprinidae
43028	Spottail shiner	N	I	P	N	L	M	P	Cyprinidae
43029	Blackchin shiner	N	I	S	N	-	M	P	Cyprinidae
43030	Bigeye shiner	N	I	R	N	-	S	B	Cyprinidae
43031	Steelcolor shiner	N	I	P	N	-	M	P	Cyprinidae
43032	Spotfin shiner	N	I	-	N	-	M	B	Cyprinidae

Procedure No. WOPA-SWS-3Date Issued 9-30-89Revision No. 6Date Effective 9-30-89

Table V-4-5. Continued

FINS Code	Species	Spc Grp	Feed Guild	TOL	IBI Grp	Riv Size	Brd Gld	Hab Pref	Family
43033	Bigmouth shiner	N	I	-	N	-	M	B	Cyprinidae
43034	Sand shiner	N	I	M	N	-	M	B	Cyprinidae
43035	Mimic shiner	N	I	I	N	-	M	B	Cyprinidae
43036	Ghost shiner	N	I	-	N	L	M	P	Cyprinidae
43037	Blacknose shiner	N	I	R	N	-	M	P	Cyprinidae
43038	Pugnose shiner	N	I	S	N	-	M	P	Cyprinidae
43039	Silverjaw minnow	M	I	-	N	P	M	B	Cyprinidae
43040	Mississippi silvery minnow	M	H	-	N	-	M	P	Cyprinidae
43041	Bullhead minnow	N	O	-	N	-	C	P	Cyprinidae
43042	Fathead minnow	M	O	T	N	P	C	B	Cyprinidae
43043	Bluntnose minnow	M	O	T	N	P	C	B	Cyprinidae
43044	Central stoneroller	M	H	-	N	-	N	B	Cyprinidae
43045	Common carp x Goldfish	G	O	T	G	-	-	-	Cyprinidae
43046	Popeye shiner	N	I	S	N	-	S	P	Cyprinidae
43047	Grass carp	G	-	-	E	-	M	B	Cyprinidae
43048	Red shiner	N	I	-	E	-	N	P	Cyprinidae
43049	Common x Rosyface Shiner	N	I	-	-	-	-	-	Cyprinidae
43057	Striped shiner/Stoneroller	M	-	-	-	-	-	-	Cyprinidae
43058	Common shiner/Stoneroller	M	-	-	-	-	-	-	Cyprinidae
43059	Striped shiner/Horny chub	M	I	-	-	-	-	-	Cyprinidae
43999	Hybrid Minnow	M	-	-	-	-	-	-	Cyprinidae
47001	Blue catfish	F	C	-	F	L	C	P	Ictaluridae
47002	Channel catfish	F	-	-	F	-	C	P	Ictaluridae
47003	White catfish	F	I	-	E	-	C	P	Ictaluridae
47004	Yellow bullhead	F	I	T	-	-	C	P	Ictaluridae
47005	Brown bullhead	F	I	T	-	-	C	P	Ictaluridae
47006	Black bullhead	F	I	P	-	-	C	P	Ictaluridae
47007	Flathead catfish	F	P	-	F	L	C	B	Ictaluridae
47008	Stonecat	O	I	I	-	-	C	R	Ictaluridae
47009	Mountain madtom	O	I	R	-	-	C	R	Ictaluridae
47010	Northern madtom	O	I	R	-	-	C	R	Ictaluridae
47011	Scioto madtom	O	I	S	-	-	C	R	Ictaluridae
47012	Brindled madtom	O	I	I	-	-	C	B	Ictaluridae
47013	Tadpole madtom	O	I	-	-	-	C	B	Ictaluridae
50001	American eel	O	C	-	-	-	M	P	Anguillidae
54000	Western Banded killifish	T	I	S	-	-	M	P	Cyprinodontidae
54001	Eastern Banded killifish	T	I	T	E	-	M	P	Cyprinodontidae
54002	Blackstripe topminnow	T	I	-	-	-	M	P	Cyprinodontidae
57001	Mosquitofish	O	I	-	E	-	N	P	Poeciliidae
60001	Burbot	O	-	-	-	-	S	B	Gadidae
63001	Trout-perch	O	I	-	-	-	M	P	Percopsidae
68001	Pirate perch	O	I	-	-	-	M	P	Aphredoderidae
70001	Brook silverside	O	I	M	-	-	M	P	Atherinidae
74001	White bass	W	P	-	F	L	M	P	Percichthyidae
74002	Striped bass	W	P	-	E	-	M	P	Percichthyidae
74003	White perch	W	-	-	E	-	M	P	Percichthyidae

Procedure No. WQPA-SWS-3Date Issued 9-30-89Revision No. 6Date Effective 9-30-89

Table V-4-5. Continued

FINS Code	Species	Spc Grp	Feed Guild	TOL	IBI Grp	Riv Size	Brd Gld	Hab Pref	Family
74004	White bass x White perch	W	-	-	-	-	-	-	Percichthyidae
74005	Striped bass x White bass	W	-	-	E	-	-	-	Percichthyidae
77001	White crappie	B	-	-	S	-	C	P	Centrarchidae
77002	Black crappie	B	-	-	S	-	C	P	Centrarchidae
77003	Rock bass	B	C	-	S	-	C	P	Centrarchidae
77004	Smallmouth bass	B	C	M	F	-	C	P	Centrarchidae
77005	Spotted bass	B	C	-	F	-	C	P	Centrarchidae
77006	Largemouth bass	B	C	-	F	-	C	P	Centrarchidae
77007	Warmouth	S	C	-	S	-	C	P	Centrarchidae
77008	Green sunfish	S	I	T	S	P	C	P	Centrarchidae
77009	Bluegill	S	I	P	S	-	C	P	Centrarchidae
77010	Orangespotted sunfish	S	I	-	S	-	C	P	Centrarchidae
77011	Longear sunfish	S	I	M	S	-	C	P	Centrarchidae
77012	Redear sunfish	S	I	-	E	-	C	P	Centrarchidae
77013	Pumpkinseed	S	I	P	S	-	C	P	Centrarchidae
77014	Bluegill x Pumpkinseed	S	-	-	-	-	-	-	Centrarchidae
77015	Green x Bluegill	S	-	-	-	-	-	-	Centrarchidae
77016	Green x Pumpkinseed	S	-	-	-	-	-	-	Centrarchidae
77017	Longear x Bluegill	S	-	-	-	-	-	-	Centrarchidae
77018	Bluegill x Orangespotted	S	-	-	-	-	-	-	Centrarchidae
77019	Green x Orangespotted	S	-	-	-	-	-	-	Centrarchidae
77020	Pumpkinseed x Longear	S	-	-	-	-	-	-	Centrarchidae
77021	Green x Longear	S	-	-	-	-	-	-	Centrarchidae
77022	O'spotted x Pumpkinseed	S	-	-	-	-	-	-	Centrarchidae
77023	Longear x Orangespotted	S	-	-	-	-	-	-	Centrarchidae
77024	Green x Warmouth	S	-	-	-	-	-	-	Centrarchidae
77025	Warmouth x Pumpkinseed	S	-	-	-	-	-	-	Centrarchidae
77998	Green Sunfish Hybrid	S	-	-	-	-	-	-	Centrarchidae
77999	Hybrid Sunfish	S	-	-	-	-	-	-	Centrarchidae
80001	Sauger	V	P	-	F	L	S	P	Percidae
80002	Walleye	V	P	-	F	-	S	P	Percidae
80003	Yellow perch	V	-	-	-	-	M	P	Percidae
80004	Dusky darter	D	I	M	D	-	S	B	Percidae
80005	Blackside darter	D	I	-	D	-	S	B	Percidae
80006	Longhead darter	D	I	S	D	-	S	R	Percidae
80007	Slenderhead darter	D	I	R	D	L	S	R	Percidae
80008	River darter	D	I	-	D	L	S	R	Percidae
80009	Channel darter	D	I	S	D	-	S	P	Percidae
80010	Gilt darter	D	I	S	D	-	S	B	Percidae
80011	Logperch	D	I	M	D	-	S	B	Percidae
80012	Crystal darter	D	I	S	D	-	S	R	Percidae
80013	Eastern sand darter	D	I	R	D	-	S	R	Percidae
80014	Johnny darter	D	I	-	D	P	C	B	Percidae
80015	Greenside darter	D	I	M	D	-	S	R	Percidae
80016	Banded darter	D	I	I	D	-	S	R	Percidae
80017	Variegated darter	D	I	I	D	-	S	R	Percidae

Procedure No. WQPA-SWS-3Date Issued 9-30-89Revision No. 6Date Effective 9-30-89

Table V-4-5. Continued

FINS Code	Species	Spc Grp	Feed Guild	TOL	IBI Grp	Riv Size	Brd Gld	Hab Pref	Family
80018	Spotted darter	D	I	R	D	-	S	R	Percidae
80019	Bluebreast darter	D	I	R	D	-	S	R	Percidae
80020	Tippecanoe darter	D	I	R	D	-	S	R	Percidae
80021	Iowa darter	D	I	-	D	-	M	P	Percidae
80022	Rainbow darter	D	I	M	D	-	S	R	Percidae
80023	Orangethroat darter	D	I	-	D	P	S	B	Percidae
80024	Fantail darter	D	I	-	D	H	C	R	Percidae
80025	Least darter	D	I	-	D	-	N	B	Percidae
80026	Sauger x Walleye	V	P	-	E	-	-	-	Percidae
85001	Freshwater drum	F	-	P	-	L	M	P	Sciaenidae
90001	Spoonhead sculpin	SC	-	-	-	-	C	P	Cottidae
90002	Mottled sculpin	SC	I	-	-	H	C	R	Cottidae
90003	Slimy sculpin	SC	-	-	-	-	-	-	Cottidae
90004	Deepwater sculpin	SC	-	-	-	-	-	-	Cottidae
95001	Brookstickleback	O	I	-	-	H	C	P	Gasterosteidae

Procedure No. WQPA-SWS-3
 Revision No. 6

Date Issued 9-30-89
 Date Effective 9-30-89

Table V-4-5, Continued

SPCLST - Legend for Species Designations

The following letter symbol designations are used to classify Ohio fish species according to their taxonomic, functional, structural, pollution tolerance, and ecological characteristics. These designations provide the basis for the Fish Information System (FINS) to calculate metrics for the Index of Biotic Integrity (FINIBI) and the Modified Index of Well-Being (FINLS2) as well as other uses.

SPC GRP (Species Group)^a

O - Other
 L - Gars
 W - Large River Species
 GS - Gizzard Shad
 SA - Salmonid
 WF - Whitefish
 T - Tolerant
 P - Pickerels
 R - Round-bodied Suckers
 C - Deep-bodied Suckers
 G - Carp/Goldfish
 N - Shiners
 M - Minnows
 F - Catfish, Drum
 B - Blackbass, Crappie
 S - Sunfish
 V - Non-darter Percidae
 D - Darters
 SC - Sculpins

FEED GUILD (Feeding Guild)^b

P - Piscivore
 F - Filter Feeder
 V - Invertivore
 I - Specialist Insectivore
 O - Omnivore
 G - Generalist
 H - Herbivore
 C - Carnivore

TOL (Pollution Tolerance)

R - Rare Intolerant
 S - Special Intolerant
 I - Common Intolerant
 M - Moderately Intolerant
 T - Highly Tolerant
 P - Moderately Tolerant

BRD GLD (Breeding Guild)^c

N - Complex, no parental care
 C - Complex with parental care
 M - simple, miscellaneous
 S - simple lithophils

IBI GRP (IBI Group)^b

E - Exotic (non-native)
 F - Sport Species
 R - Round-bodied Sucker
 C - Deep-bodied Sucker
 W - White sucker
 G - Carp/Goldfish
 N - Other Cyprinidae
 S - Sunfish (less Blackbasses)
 D - Darters

RIV SIZ (River Size)

L - Large River Species
 H - Headwaters Species
 P - Pioneering Species

HAB PRF (Habitat Pref.)^c

P - prefers pools
 R - prefers riffles
 B - prefers both

^athese designations are not for use in any FINS analytical programs.

^bdesignations are patterned after Karr et al. (1986).

^cdesignations are patterned after Berkman and Rabeni (1987).

Procedure No. WQPA-SWS-3
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