



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060050      **LSite:** OML-05-0020  
**Site:** Little Laughery Creek      **Location:** SR 46      **County:** Franklin  
**Latitude:** 39.308573      **Longitude:** -85.239417      **IASNat Region:** 11B      **Topo:** G-43      **Segment:** 88  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 5.200      **Gradient (ft/mile):** 5.349

## Sample Information

**SampleNumber:** AB38736      **EventID:** 19T001      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** KAG      **SampleTime:** 01:40:00 PM      **HydroLabNumber:** P8  
**WaterFlowType:** Pool      **WaterAppearance:** Clear      **SkyConditions:** 8 - Rain      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 7.77      **pH:** 7.91      **WaterTemp(°C):** 24.9      **SpecificConductivity (µS/cm):** 477      **Turbidity (NTU):** 5.44  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 3      **DistanceFished (m):** 50  
**SecondsFished:** 376      **WaterDepthAvg (m):** .25      **WaterDepthMax (m):** .5      **TimeAtSite:** 01:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 47      **SubstrateScore (max20):** 11      **InstreamCover Score (max20):** 13      **ChannelMorphologyScore (max20):** 10  
**RiparianZoneBankErosion Score(max10):** 3      **Pool/GlideQualityScore(max12):** 4      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 6      **%Pool:** 30      **%Riffle:** 0      **%Run:** 70      **%Glide:** 0      **CanopyCover PctOpen:** 30%-<55%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u>	<u>Metric</u>		<u>Actual</u>	<u>Metric</u>
	<u>Observation</u>	<u>Score</u>		<u>Observation</u>	<u>Score</u>
<b>SpeciesCount:</b>	13	5	<b>%TolerantIndividuals:</b>	40.75	3
<b>Darter/Madtom/SculpinSpeciesCount:</b>	3	5	<b>%OmnivoreIndividuals:</b>	26.37	3
<b>%HeadwaterIndividuals:</b>	0	1	<b>%InsectivoreIndividuals:</b>	51.71	5
<b>MinnnowSpeciesCount:</b>	5	5	<b>%PioneerIndividuals:</b>	81.16	1
<b>SensitiveSpeciesCount:</b>	2	3	<b>Total # of Individuals (CPUE):</b>	292	5
			<b>%SimpleLithophilicInd.:</b>	12.33	1
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and  
 Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending  
 on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>42</b>
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SampleNumber: AB38736

EventID: 19T001

LSite: OML-05-0020

County: Franklin

StreamName: Little Laughery Creek

LocationDescription: SR 46

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	13					
Bluntnose Minnow	54					
Central Stoneroller	23					
Creek Chub	41					
Green Sunfish	1					
Greenside Darter	5					
Johnny Darter	38					
Longear Sunfish	2					
Orangethroat Darter	2					
Redear Sunfish	1					
Silverjaw Minnow	78					
Striped Shiner	11					
White Sucker	23					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060050      **LSite:** OML-05-0021  
**Site:** Little Laughery Creek      **Location:** SR 229      **County:** Ripley  
**Latitude:** 39.259897      **Longitude:** -85.242871      **IASNat Region:** 11C      **Topo:** G-43      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 14.737      **Gradient (ft/mile):** 4.592

## Sample Information

**SampleNumber:** AB38737      **EventID:** 19T002      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** TAF      **SampleTime:** 03:30:00 PM      **HydroLabNumber:** P5  
**WaterFlowType:** Glide      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 13      **pH:** 8.56      **WaterTemp(°C):** 30.6      **SpecificConductivity (µS/cm):** 718      **Turbidity (NTU):** 6.69  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 200      **Avg.StreamWidth(m):** 7      **DistanceFished (m):** 105  
**SecondsFished:** 530      **WaterDepthAvg (m):** .3      **WaterDepthMax (m):** .5      **TimeAtSite:** 01:10  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** Started site US of first artificial riprap riffle.

## Habitat Information

**TotalScore (max100):** 49      **SubstrateScore (max20):** 13      **InstreamCover Score (max20):** 12      **ChannelMorphologyScore (max20):** 6  
**RiparianZoneBankErosion Score(max10):** 4      **Pool/GlideQualityScore(max12):** 6      **Riffle/RunQualityScore(max8):** 2  
**GradientScore (max10):** 6      **%Pool:** 10      **%Riffle:** 10      **%Run:** 30      **%Glide:** 50      **CanopyCover PctOpen:** >85%-Open  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	13	3	%TolerantIndividuals:	10.67	5
Darter/Madtom/SculpinSpeciesCount:	3	3	%OmnivoreIndividuals:	4	5
%HeadwaterIndividuals:	1.33	1	%InsectivoreIndividuals:	78.67	5
MinnnowSpeciesCount:	6	3	%PioneerIndividuals:	30.67	3
SensitiveSpeciesCount:	3	3	Total # of Individuals (CPUE):	75	1
			%SimpleLithophilicInd.:	2.67	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>38</b>
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SampleNumber: AB38737

EventID: 19T002

LSite: OML-05-0021

County: Ripley

StreamName: Little Laughery Creek

LocationDescription: SR 229

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	16					
Bluntnose Minnow	3					
Central Stoneroller	11					
Creek Chub	2					
Fantail Darter	1					
Greenside Darter	23					
Johnny Darter	5					
Longear Sunfish	4					
Northern Hog Sucker	1					
Silverjaw Minnow	2					
Spotfin Shiner	3					
Striped Shiner	1					
Yellow Bullhead	3					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060060      **LSite:** OML-05-0022  
**Site:** Bobs Cr      **Location:** CR 1300 N      **County:** Ripley  
**Latitude:** 39.264687      **Longitude:** -85.241256      **IASNat Region:** 11C      **Topo:** G-43      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 9.177      **Gradient (ft/mile):** 4.948

## Sample Information

**SampleNumber:** AB38738      **EventID:** 19T003      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** KAG      **SampleTime:** 12:25:00 PM      **HydroLabNumber:** P8  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 2 - Scattered      **AirTemperature:** 6 - > 86  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 8.55      **pH:** 7.8      **WaterTemp(°C):** 26.2      **SpecificConductivity (µS/cm):** 399      **Turbidity (NTU):** 6.64  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 4      **DistanceFished (m):** 60  
**SecondsFished:** 420      **WaterDepthAvg (m):** .2      **WaterDepthMax (m):** .5      **TimeAtSite:** 01:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 49      **SubstrateScore (max20):** 13      **InstreamCover Score (max20):** 12      **ChannelMorphologyScore (max20):** 10  
**RiparianZoneBankErosion Score(max10):** 3      **Pool/GlideQualityScore(max12):** 5      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 6      **%Pool:** 30      **%Riffle:** 10      **%Run:** 60      **%Glide:** 0      **CanopyCover PctOpen:** 55%-<85%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	15	5	<b>%TolerantIndividuals:</b>	49.74	3
<b>Darter/Madtom/SculpinSpeciesCount:</b>	3	5	<b>%OmnivoreIndividuals:</b>	31.41	3
<b>%HeadwaterIndividuals:</b>	0.52	1	<b>%InsectivoreIndividuals:</b>	50.79	5
<b>MinnnowSpeciesCount:</b>	6	5	<b>%PioneerIndividuals:</b>	62.3	1
<b>SensitiveSpeciesCount:</b>	1	1	<b>Total # of Individuals (CPUE):</b>	191	3
			<b>%SimpleLithophilicInd.:</b>	12.57	1
			<b>%Ind.withDELT:</b>	0.52	3

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>36</b>
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SampleNumber: AB38738

EventID: 19T003

LSite: OML-05-0022

County: Ripley

StreamName: Bobs Cr

LocationDescription: CR 1300 N

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	28					
Bluntnose Minnow	44					
Central Stoneroller	15					
Creek Chub	16					
Fantail Darter	1					
Green Sunfish	1					
Johnny Darter	25					
Largemouth Bass	3					
Northern Hog Sucker	3					
Orangethroat Darter	2					
Silverjaw Minnow	16					
Striped Shiner	2					
Suckermouth Minnow	1					
White Sucker	16					
Yellow Bullhead	18			1		



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060060      **LSite:** OML-05-0023  
**Site:** Little Laughery Creek      **Location:** CR 1250 N/Legion Road      **County:** Ripley  
**Latitude:** 39.251706      **Longitude:** -85.240631      **IASNat Region:** 11C      **Topo:** G-43      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 25.228      **Gradient (ft/mile):** 4.625

## Sample Information

**SampleNumber:** AB38739      **EventID:** 19T004      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** TAF      **SampleTime:** 01:20:00 PM      **HydroLabNumber:** P5  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 3 - Partly      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 5.64      **pH:** 7.6      **WaterTemp(°C):** 27      **SpecificConductivity (µS/cm):** 694      **Turbidity (NTU):** 18.3  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 200      **Avg.StreamWidth(m):** 11      **DistanceFished (m):** 165  
**SecondsFished:** 1411      **WaterDepthAvg (m):** .8      **WaterDepthMax (m):** 1.2      **TimeAtSite:** 01:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 57      **SubstrateScore (max20):** 12      **InstreamCover Score (max20):** 12      **ChannelMorphologyScore (max20):** 11  
**RiparianZoneBankErosion Score(max10):** 7      **Pool/GlideQualityScore(max12):** 9      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 6      **%Pool:** 70      **%Riffle:** 0      **%Run:** 10      **%Glide:** 20      **CanopyCover PctOpen:** 30%-<55%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	15	5	%TolerantIndividuals:	12.12	5
DarterSpeciesCount:	2	3	%OmnivoreIndividuals:	7.58	5
SunfishSpeciesCount:	5	5	%InsectivoreIndividuals:	84.85	5
SuckerSpeciesCount:	5	5	%CarnivoreIndividuals:	7.58	3
SensitiveSpeciesCount:	6	5	Total # of Individuals (CPUE):	66	1
			%SimpleLithophilicInd.:	25.76	3
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>50</b>
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SampleNumber: AB38739

EventID: 19T004

LSite: OML-05-0023

County: Ripley

StreamName: Little Laughery Creek

LocationDescription: CR 1250 N/Legion Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	5					
Bluegill	29					
Gizzard Shad	4					
Golden Redhorse	5					
Green Sunfish	3					
Greenside Darter	1					
Johnny Darter	1					
Largemouth Bass	4					
Longear Sunfish	4					
Northern Hog Sucker	1					
Redear Sunfish	2					
Silver Shiner	1					
Spotted Sucker	4					
Warmouth	1					
White Sucker	1					





# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060010      **LSite:** OML-05-0009  
**Site:** Laughery Creek      **Location:** CR 250 W      **County:** Ripley  
**Latitude:** 39.255213      **Longitude:** -85.305615      **IASNat Region:** 11C      **Topo:** G-42      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 13.253      **Gradient (ft/mile):** 6.416

## Sample Information

**SampleNumber:** AB38740      **EventID:** 19T005      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** KAG      **SampleTime:** 09:40:00 AM      **HydroLabNumber:** P8  
**WaterFlowType:** Pool      **WaterAppearance:** Clear      **SkyConditions:** 2 - Scattered      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 5.66      **pH:** 7.82      **WaterTemp(°C):** 23.4      **SpecificConductivity (µS/cm):** 379      **Turbidity (NTU):** 5.57  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 3      **DistanceFished (m):** 50  
**SecondsFished:** 496      **WaterDepthAvg (m):** .1      **WaterDepthMax (m):** .2      **TimeAtSite:** 01:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 62      **SubstrateScore (max20):** 15      **InstreamCover Score (max20):** 12      **ChannelMorphologyScore (max20):** 10  
**RiparianZoneBankErosion Score(max10):** 6      **Pool/GlideQualityScore(max12):** 4      **Riffle/RunQualityScore(max8):** 5  
**GradientScore (max10):** 10      **%Pool:** 25      **%Riffle:** 30      **%Run:** 45      **%Glide:** 0      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	10	3	<b>%TolerantIndividuals:</b>	17.98	5
<b>Darter/Madtom/SculpinSpeciesCount:</b>	4	5	<b>%OmnivoreIndividuals:</b>	2.25	5
<b>%HeadwaterIndividuals:</b>	46.07	5	<b>%InsectivoreIndividuals:</b>	83.71	5
<b>MinnnowSpeciesCount:</b>	5	3	<b>%PioneerIndividuals:</b>	45.51	3
<b>SensitiveSpeciesCount:</b>	1	1	<b>Total # of Individuals (CPUE):</b>	178	3
			<b>%SimpleLithophilicInd.:</b>	3.93	1
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>44</b>
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SampleNumber: AB38740

EventID: 19T005

LSite: OML-05-0009

County: Ripley

StreamName: Laughery Creek

LocationDescription: CR 250 W

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluntnose Minnow	4					
Central Stoneroller	1					
Creek Chub	24					
Fantail Darter	82					
Green Sunfish	4					
Greenside Darter	11					
Johnny Darter	40					
Orangethroat Darter	3					
Silverjaw Minnow	5					
Striped Shiner	4					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060020      **LSite:** OML-05-0024  
**Site:** Tub Creek      **Location:** CR 250 W      **County:** Ripley  
**Latitude:** 39.256052      **Longitude:** -85.305505      **IASNat Region:** 11B      **Topo:** G-42      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 11.356      **Gradient (ft/mile):** 6.436

## Sample Information

**SampleNumber:** AB38741      **EventID:** 19T006      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** KAG      **SampleTime:** 10:45:00 AM      **HydroLabNumber:** P8  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 2 - Scattered      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 7.72      **pH:** 7.83      **WaterTemp(°C):** 26.2      **SpecificConductivity (µS/cm):** 442      **Turbidity (NTU):** 3.31  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 4      **DistanceFished (m):** 60  
**SecondsFished:** 581      **WaterDepthAvg (m):** .25      **WaterDepthMax (m):** .5      **TimeAtSite:** 01:15  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 53      **SubstrateScore (max20):** 15      **InstreamCover Score (max20):** 6      **ChannelMorphologyScore (max20):** 8  
**RiparianZoneBankErosion Score(max10):** 2      **Pool/GlideQualityScore(max12):** 6      **Riffle/RunQualityScore(max8):** 6  
**GradientScore (max10):** 10      **%Pool:** 20      **%Riffle:** 20      **%Run:** 60      **%Glide:** 0      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	13	5	<b>%TolerantIndividuals:</b>	32.45	3
<b>Darter/Madtom/SculpinSpeciesCount:</b>	4	5	<b>%OmnivoreIndividuals:</b>	17.11	5
<b>%HeadwaterIndividuals:</b>	7.08	1	<b>%InsectivoreIndividuals:</b>	56.64	5
<b>MinnnowSpeciesCount:</b>	5	3	<b>%PioneerIndividuals:</b>	88.79	1
<b>SensitiveSpeciesCount:</b>	2	1	<b>Total # of Individuals (CPUE):</b>	339	5
			<b>%SimpleLithophilicInd.:</b>	9.44	1
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>40</b>
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SampleNumber: AB38741

EventID: 19T006

LSite: OML-05-0024

County: Ripley

StreamName: Tub Creek

LocationDescription: CR 250 W

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluntnose Minnow	57					
Central Stoneroller	35					
Creek Chub	51					
Fantail Darter	24					
Greenside Darter	7					
Johnny Darter	61					
Largemouth Bass	3					
Northern Hog Sucker	1					
Orangethroat Darter	29					
Silverjaw Minnow	68					
Striped Shiner	1					
White Sucker	1					
Yellow Bullhead	1					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060070      **LSite:** OML-05-0025  
**Site:** Ripley Cr      **Location:** SR 48      **County:** Ripley  
**Latitude:** 39.207134      **Longitude:** -85.144999      **IASNat Region:** 11B      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 7.280      **Gradient (ft/mile):** 12.09

## Sample Information

**SampleNumber:** AB38742      **EventID:** 19T007      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** KAG      **SampleTime:** 02:45:00 PM      **HydroLabNumber:** P8  
**WaterFlowType:** Pool      **WaterAppearance:** Murky      **SkyConditions:** 2 - Scattered      **AirTemperature:** 6 - > 86  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 6.74      **pH:** 7.84      **WaterTemp(°C):** 23.6      **SpecificConductivity (µS/cm):** 677      **Turbidity (NTU):** 6.83  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 8      **DistanceFished (m):** 120  
**SecondsFished:** 1802      **WaterDepthAvg (m):** .25      **WaterDepthMax (m):** 1      **TimeAtSite:** 01:15  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** Pond directly east of stream

## Habitat Information

**TotalScore (max100):** 53      **SubstrateScore (max20):** 10      **InstreamCover Score (max20):** 14      **ChannelMorphologyScore (max20):** 8  
**RiparianZoneBankErosion Score(max10):** 5      **Pool/GlideQualityScore(max12):** 8      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 8      **%Pool:** 20      **%Riffle:** 0      **%Run:** 0      **%Glide:** 80      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	12	5	<b>%TolerantIndividuals:</b>	44.14      3
<b>Darter/Madtom/SculpinSpeciesCount:</b>	3	5	<b>%OmnivoreIndividuals:</b>	27.93      3
<b>%HeadwaterIndividuals:</b>	0	1	<b>%InsectivoreIndividuals:</b>	55.86      5
<b>MinnnowSpeciesCount:</b>	5	3	<b>%PioneerIndividuals:</b>	72.07      1
<b>SensitiveSpeciesCount:</b>	2	3	<b>Total # of Individuals (CPUE):</b>	111      3
			<b>%SimpleLithophilicInd.:</b>	2.7      1
			<b>%Ind.withDELT:</b>	0      5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>38</b>
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SampleNumber: AB38742

EventID: 19T007

LSite: OML-05-0025

County: Ripley

StreamName: Ripley Cr

LocationDescription: SR 48

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	20					
Bluntnose Minnow	31					
Central Stoneroller	5					
Creek Chub	11					
Green Sunfish	6					
Greenside Darter	2					
Johnny Darter	12					
Longear Sunfish	6					
Orangethroat Darter	1					
Scarlet Shiner	2					
Silverjaw Minnow	14					
Yellow Bullhead	1					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060070      **LSite:** OML-05-0026  
**Site:** Ripley Cr      **Location:** N Old Milan Rd      **County:** Ripley  
**Latitude:** 39.174809      **Longitude:** -85.170030      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 18.703      **Gradient (ft/mile):** 4.553

## Sample Information

**SampleNumber:** AB38743      **EventID:** 19T008      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** KRW      **SampleTime:** 09:35:00 AM      **HydroLabNumber:** P7  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 4 - 61-75  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 4.43      **pH:** 7.32      **WaterTemp(°C):** 24.2      **SpecificConductivity (µS/cm):** 508      **Turbidity (NTU):** 7.23  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 8      **DistanceFished (m):** 120  
**SecondsFished:** 1077      **WaterDepthAvg (m):** .4      **WaterDepthMax (m):** 1.1      **TimeAtSite:** 01:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 56      **SubstrateScore (max20):** 13      **InstreamCover Score (max20):** 15      **ChannelMorphologyScore (max20):** 10  
**RiparianZoneBankErosion Score(max10):** 5      **Pool/GlideQualityScore(max12):** 7      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 6      **%Pool:** 30      **%Riffle:** 0      **%Run:** 70      **%Glide:** 0      **CanopyCover PctOpen:** >85%-Open  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	19	5	%TolerantIndividuals:	33.78	3
Darter/Madtom/SculpinSpeciesCount:	5	5	%OmnivoreIndividuals:	7.43	5
%HeadwaterIndividuals:	4.05	1	%InsectivoreIndividuals:	70.95	5
MinnnowSpeciesCount:	5	3	%PioneerIndividuals:	46.62	3
SensitiveSpeciesCount:	6	5	Total # of Individuals (CPUE):	148	3
			%SimpleLithophilicInd.:	15.54	1
			%Ind.withDELT:	0.68	3

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>42</b>
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SampleNumber: AB38743

EventID: 19T008

LSite: OML-05-0026

County: Ripley

StreamName: Ripley Cr

LocationDescription: N Old Milan Rd

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	1					
Blackside Darter	1					
Bluegill	25					
Bluntnose Minnow	1					
Central Stoneroller	1	1				
Creek Chub	26					
Fantail Darter	6					
Green Sunfish	13					
Greenside Darter	16					
Johnny Darter	27					
Largemouth Bass	3					
Longear Sunfish	5					
Northern Hog Sucker	4					
Orangethroat Darter	1					
Rock Bass	2					
Silver Shiner	2					
Spotted Sucker	1					
Striped Shiner	3					
White Sucker	10					





# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060080      **LSite:** OML-05-0027  
**Site:** Ripley Cr      **Location:** SR 48      **County:** Ripley  
**Latitude:** 39.199242      **Longitude:** -85.202093      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 27.588      **Gradient (ft/mile):** 5.831

## Sample Information

**SampleNumber:** AB38744      **EventID:** 19T009      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** KRW      **SampleTime:** 12:00:00 PM      **HydroLabNumber:** P7  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 7.61      **pH:** 7.76      **WaterTemp(°C):** 24.5      **SpecificConductivity (µS/cm):** 434      **Turbidity (NTU):** 4.77  
**SpecialNotes:**

**ElectrofishingEquipment:** Canoe      **Voltage:** 225      **Avg.StreamWidth(m):** 14      **DistanceFished (m):** 220  
**SecondsFished:** 1768      **WaterDepthAvg (m):** .4      **WaterDepthMax (m):** .7      **TimeAtSite:** 03:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** 19 min 49 sec w/MLES in Canoe; 579 seconds with backpack

## Habitat Information

**TotalScore (max100):** 75      **SubstrateScore (max20):** 18      **InstreamCover Score (max20):** 17      **ChannelMorphologyScore (max20):** 13  
**RiparianZoneBankErosion Score(max10):** 7      **Pool/GlideQualityScore(max12):** 9      **Riffle/RunQualityScore(max8):** 5  
**GradientScore (max10):** 6      **%Pool:** 25      **%Riffle:** 15      **%Run:** 60      **%Glide:** 0      **CanopyCover PctOpen:** 30%<-55%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	21	5	%TolerantIndividuals:	21	5
DarterSpeciesCount:	5	5	%OmnivoreIndividuals:	15.3	5
SunfishSpeciesCount:	5	5	%InsectivoreIndividuals:	72.95	5
SuckerSpeciesCount:	3	3	%CarnivoreIndividuals:	1.78	1
SensitiveSpeciesCount:	7	5	Total # of Individuals (CPUE):	281	5
			%SimpleLithophilicInd.:	19.93	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>50</b>
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SampleNumber: AB38744

EventID: 19T009

LSite: OML-05-0027

County: Ripley

StreamName: Ripley Cr

LocationDescription: SR 48

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	2					
Blackside Darter	10					
Bluegill	40					
Bluntnose Minnow	24					
Central Stoneroller	22					
Creek Chub	6					
Fantail Darter	14					
Green Sunfish	9					
Greenside Darter	28					
Johnny Darter	39					
Logperch	4					
Longear Sunfish	30					
Northern Hog Sucker	10					
Redear Sunfish	1					
Rock Bass	2					
Silver Shiner	5					
Silverjaw Minnow	6					
Spotted Bass	3					
Striped Shiner	6					
White Sucker	19					
Yellow Bullhead	1					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060090      **LSite:** OML-05-0028  
**Site:** N Br Ripley Cr      **Location:** N Adams Church Rd      **County:** Ripley  
**Latitude:** 39.211765      **Longitude:** -85.205977      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 6.323      **Gradient (ft/mile):** 9.453

## Sample Information

**SampleNumber:** AB38745      **EventID:** 19T010      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** KAG      **SampleTime:** 10:50:00 AM      **HydroLabNumber:** P8  
**WaterFlowType:** Pool      **WaterAppearance:** Clear      **SkyConditions:** 2 - Scattered      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 8.02      **pH:** 8.08      **WaterTemp(°C):** 23.5      **SpecificConductivity (µS/cm):** 453      **Turbidity (NTU):** 3.4  
**SpecialNotes:** Stream becomes very shallow

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 5      **DistanceFished (m):** 75  
**SecondsFished:** 708      **WaterDepthAvg (m):** .2      **WaterDepthMax (m):** .5      **TimeAtSite:** 01:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** Stream becomes very shallow

## Habitat Information

**TotalScore (max100):** 57      **SubstrateScore (max20):** 15      **InstreamCover Score (max20):** 13      **ChannelMorphologyScore (max20):** 11  
**RiparianZoneBankErosion Score(max10):** 6      **Pool/GlideQualityScore(max12):** 6      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 6      **%Pool:** 30      **%Riffle:** 20      **%Run:** 50      **%Glide:** 0      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	11	3	<b>%TolerantIndividuals:</b>	50.75	1
<b>Darter/Madtom/SculpinSpeciesCount:</b>	4	5	<b>%OmnivoreIndividuals:</b>	14.93	5
<b>%HeadwaterIndividuals:</b>	6.97	1	<b>%InsectivoreIndividuals:</b>	39.3	3
<b>MinnnowSpeciesCount:</b>	4	3	<b>%PioneerIndividuals:</b>	83.08	1
<b>SensitiveSpeciesCount:</b>	1	1	<b>Total # of Individuals (CPUE):</b>	201	5
			<b>%SimpleLithophilicInd.:</b>	6.97	1
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>34</b>
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SampleNumber: AB38745

EventID: 19T010

LSite: OML-05-0028

County: Ripley

StreamName: N Br Ripley Cr

LocationDescription: N Adams Church Rd

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	3					
Bluntnose Minnow	20					
Central Stoneroller	19					
Creek Chub	72					
Fantail Darter	14					
Greenside Darter	6					
Johnny Darter	47					
Largemouth Bass	1					
Orangethroat Darter	4					
Silverjaw Minnow	5					
White Sucker	10					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060090      **LSite:** OML-05-0029  
**Site:** Ripley Cr      **Location:** SR 129      **County:** Ripley  
**Latitude:** 39.209922      **Longitude:** -85.209096      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 38.692      **Gradient (ft/mile):** 8.298

## Sample Information

**SampleNumber:** AB38746      **EventID:** 19T011      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/17/2019      **SurveyCrewChief:** KRW      **SampleTime:** 10:15:00 AM      **HydroLabNumber:** P7  
**WaterFlowType:** Glide      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 5 - 76-85  
**WindDirection:** 0 - North (0 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 5.81      **pH:** 7.62      **WaterTemp(°C):** 24.2      **SpecificConductivity (µS/cm):** 436.9      **Turbidity (NTU):** 4.51  
**SpecialNotes:**

**ElectrofishingEquipment:** Canoe      **Voltage:** 200      **Avg.StreamWidth(m):** 16      **DistanceFished (m):** 240  
**SecondsFished:** 2181      **WaterDepthAvg (m):** .4      **WaterDepthMax (m):** .5      **TimeAtSite:** 03:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** Shocked D/S up to & just included bridge to capture influence of pour point/confluence U/S of bridge

## Habitat Information

**TotalScore (max100):** 72      **SubstrateScore (max20):** 18      **InstreamCover Score (max20):** 11      **ChannelMorphologyScore (max20):** 12  
**RiparianZoneBankErosion Score(max10):** 8      **Pool/GlideQualityScore(max12):** 7      **Riffle/RunQualityScore(max8):** 6  
**GradientScore (max10):** 10      **%Pool:** 20      **%Riffle:** 10      **%Run:** 70      **%Glide:** 0      **CanopyCover PctOpen:** 30%-<55%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	20	5	%TolerantIndividuals:	22.19	5
DarterSpeciesCount:	5	5	%OmnivoreIndividuals:	16.39	5
SunfishSpeciesCount:	4	5	%InsectivoreIndividuals:	70.2	5
SuckerSpeciesCount:	3	3	%CarnivoreIndividuals:	0.66	1
SensitiveSpeciesCount:	6	5	Total # of Individuals (CPUE):	604	5
			%SimpleLithophilicInd.:	7.62	1
			%Ind.withDELT:	0.17	3

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>48</b>
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SampleNumber: AB38746

EventID: 19T011

LSite: OML-05-0029

County: Ripley

StreamName: Ripley Cr

LocationDescription: SR 129

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	2					
Bluegill	26					
Bluntnose Minnow	89	1				
Central Stoneroller	50					
Creek Chub	27					
Fantail Darter	92					
Green Sunfish	6					
Greenside Darter	141					
Johnny Darter	83					
Largemouth Bass	1					
Logperch	2					
Longear Sunfish	9					
Northern Hog Sucker	17					
Orangethroat Darter	2					
Rock Bass	3					
Silverjaw Minnow	29					
Striped Shiner	8					
Suckermouth Minnow	5					
White Sucker	10					
Yellow Bullhead	2					



Indiana Department of Environmental Management  
Fish Community Assessments

**Site Information**

SubBasin: Middle Ohio-Laughery      14 digit HUC: 05090203060100      LSite: OML-05-0030  
 Site: Laughery Creek      Location: SR 48      County: Ripley  
 Latitude: 39.197305      Longitude: -85.247507      IASNat Region: 11C      Topo: G-67      Segment: 93  
 Ecoregion: Eastern Corn Belt Plains      Drainage Area (sq.miles): 115.769      Gradient (ft/mile): 2.896

**Sample Information**

SampleNumber: AB38747      EventID: 19T012      Sample MediumCollected: Fish Community + Water  
 SampleDate: 07/15/2019      SurveyCrewChief: TAF      SampleTime: 10:30:00 AM      HydroLabNumber: P5  
 WaterFlowType: Run      WaterAppearance: Clear      SkyConditions: 2 - Scattered      AirTemperature: 5 - 76-85  
 WindDirection: 27 - West (270 degrees)      WindStrength: 1 - Light  
 DissolvedO2 (mg/l): 6.32      pH: 7.71      WaterTemp(°C): 24.7      SpecificConductivity (µS/cm): 426      Turbidity (NTU): 8.05  
 SpecialNotes:

ElectrofishingEquipment: Canoe      Voltage: 250      Avg.StreamWidth(m): 17      DistanceFished (m): 255  
 SecondsFished: 1776      WaterDepthAvg (m): .3      WaterDepthMax (m): 1.2      TimeAtSite: 03:15  
 BridgeInReach:       ReachRepresentative:       WhyReachNotRepresentative:  
 SpecialComments: canoe w/MLES

**Habitat Information**

TotalScore (max100): 75      SubstrateScore (max20): 14      InstreamCover Score (max20): 14      ChannelMorphologyScore (max20): 17  
 RiparianZoneBankErosion Score(max10): 8      Pool/GlideQualityScore(max12): 11      Riffle/RunQualityScore(max8): 3  
 GradientScore (max10): 8      %Pool: 50      %Riffle: 10      %Run: 30      %Glide: 10      CanopyCover PctOpen: 55%<-85%  
 SubjectiveRating:      AestheticRating:      NOTES: "NEW RECORD"

**Fish Community Index of Biotic Integrity (IBI) Information**

Calibration Used: Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	24	5	%TolerantIndividuals:	7.52	5
DarterSpeciesCount:	4	5	%OmnivoreIndividuals:	6.19	5
SunfishSpeciesCount:	5	5	%InsectivoreIndividuals:	87.61	5
SuckerSpeciesCount:	7	5	%CarnivoreIndividuals:	5.75	3
SensitiveSpeciesCount:	7	5	Total # of Individuals (CPUE):	226	3
			%SimpleLithophilicInd.:	46.9	5
			%Ind.withDELT:	0.44	3

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	54
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SampleNumber: AB38747

EventID: 19T012

LSite: OML-05-0030

County: Ripley

StreamName: Laughery Creek

LocationDescription: SR 48

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	40					
Bluegill	24					
Bluntnose Minnow	3					
Fantail Darter	2					
Gizzard Shad	8					
Golden Redhorse	24					
Green Sunfish	2					
Greenside Darter	19					
Johnny Darter	4					
Largemouth Bass	4					
Logperch	9					
Longear Sunfish	37					
Northern Hog Sucker	26					
Quillback	1					
River Carpsucker	1					
Rock Bass	8					
Scarlet Shiner	1					
Spotfin Shiner	4					
Spotted Bass	1					
Spotted Sucker	1					
Striped Shiner	4	1				
White Crappie	1					
White Sucker	1					
Yellow Bullhead	1					





# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060100      **LSite:** OML-05-0031  
**Site:** Laughery Creek      **Location:** Salem Rd      **County:** Ripley  
**Latitude:** 39.227421      **Longitude:** -85.242040      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 68.782      **Gradient (ft/mile):** 3.294

## Sample Information

**SampleNumber:** AB38748      **EventID:** 19T013      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** TAF      **SampleTime:** 02:30:00 PM      **HydroLabNumber:** P5  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 2 - Scattered      **AirTemperature:** 6 - > 86  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 7.26      **pH:** 7.74      **WaterTemp(°C):** 25.7      **SpecificConductivity (µS/cm):** 530      **Turbidity (NTU):** 5.08  
**SpecialNotes:**

**ElectrofishingEquipment:** Scanoe      **Voltage:** 240      **Avg.StreamWidth(m):** 15      **DistanceFished (m):** 225  
**SecondsFished:** 1698      **WaterDepthAvg (m):** .3      **WaterDepthMax (m):** 1.2      **TimeAtSite:** 03:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 53      **SubstrateScore (max20):** 7      **InstreamCover Score (max20):** 12      **ChannelMorphologyScore (max20):** 10  
**RiparianZoneBankErosion Score(max10):** 7      **Pool/GlideQualityScore(max12):** 11      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 6      **%Pool:** 50      **%Riffle:** 0      **%Run:** 30      **%Glide:** 20      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	27	5	%TolerantIndividuals:	31.21	3
DarterSpeciesCount:	5	5	%OmnivoreIndividuals:	27.58	3
SunfishSpeciesCount:	6	5	%InsectivoreIndividuals:	68.48	5
SuckerSpeciesCount:	4	5	%CarnivoreIndividuals:	3.33	1
SensitiveSpeciesCount:	10	5	Total # of Individuals (CPUE):	330	5
			%SimpleLithophilicInd.:	18.79	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>48</b>
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SampleNumber: AB38748

EventID: 19T013

LSite: OML-05-0031

County: Ripley

StreamName: Laughery Creek

LocationDescription: Salem Rd

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Crappie	1					
Black Redhorse	7					
Blackside Darter	1					
Bluegill	48					
Bluntnose Minnow	85					
Brindled Madtom	1					
Brook Silverside	1					
Creek Chub	2					
Fantail Darter	2					
Gizzard Shad	1					
Golden Redhorse	16					
Green Sunfish	8					
Greenside Darter	7					
Johnny Darter	23					
Largemouth Bass	1					
Logperch	1					
Longear Sunfish	52					
Northern Hog Sucker	17					
Redear Sunfish	2					
Rock Bass	3					
Silver Shiner	6					
Silverjaw Minnow	20					
Spotfin Shiner	2					
Spotted Bass	7					
Striped Shiner	9					
White Sucker	5					
Yellow Bullhead	2					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060040      **LSite:** OML060-0007  
**Site:** Laughery Creek      **Location:** SR 229      **County:** Ripley  
**Latitude:** 39.245439      **Longitude:** -85.247874      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 39.718      **Gradient (ft/mile):** 5.865

## Sample Information

**SampleNumber:** AB38749      **EventID:** 19T014      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** TAF      **SampleTime:** 11:30:00 AM      **HydroLabNumber:** P5  
**WaterFlowType:** Pool      **WaterAppearance:** Clear      **SkyConditions:** 3 - Partly      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 7.37      **pH:** 7.73      **WaterTemp(°C):** 24.9      **SpecificConductivity (µS/cm):** 277      **Turbidity (NTU):** 5.25  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 200      **Avg.StreamWidth(m):** 12      **DistanceFished (m):** 180  
**SecondsFished:** 1272      **WaterDepthAvg (m):** .3      **WaterDepthMax (m):** 1.2      **TimeAtSite:** 01:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** Started sampling ~100ft US of bridge as that area is more representative

## Habitat Information

**TotalScore (max100):** 66      **SubstrateScore (max20):** 15      **InstreamCover Score (max20):** 13      **ChannelMorphologyScore (max20):** 14  
**RiparianZoneBankErosion Score(max10):** 4      **Pool/GlideQualityScore(max12):** 10      **Riffle/RunQualityScore(max8):** 4  
**GradientScore (max10):** 6      **%Pool:** 50      **%Riffle:** 10      **%Run:** 30      **%Glide:** 10      **CanopyCover PctOpen:** 30%-<55%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	21	5	%TolerantIndividuals:	13.13	5
DarterSpeciesCount:	5	5	%OmnivoreIndividuals:	7.19	5
SunfishSpeciesCount:	4	5	%InsectivoreIndividuals:	75.31	5
SuckerSpeciesCount:	3	3	%CarnivoreIndividuals:	1.88	1
SensitiveSpeciesCount:	7	5	Total # of Individuals (CPUE):	320	5
			%SimpleLithophilicInd.:	15	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>50</b>
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SampleNumber: AB38749

EventID: 19T014

LSite: OML060-0007

County: Ripley

StreamName: Laughery Creek

LocationDescription: SR 229

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	2					
Bluegill	28					
Bluntnose Minnow	4					
Brook Silverside	1					
Central Stoneroller	48					
Creek Chub	1					
Fantail Darter	38					
Green Sunfish	16					
Greenside Darter	91					
Johnny Darter	19					
Largemouth Bass	2					
Logperch	2					
Longear Sunfish	17					
Northern Hog Sucker	4					
Orangethroat Darter	1					
Rock Bass	4					
Scarlet Shiner	1					
Silverjaw Minnow	1					
Striped Shiner	19					
White Sucker	19					
Yellow Bullhead	2					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060040      **LSite:** OML060-0005  
**Site:** Tributary of Laughery Creek      **Location:** CR 1050 N      **County:** Ripley  
**Latitude:** 39.227994      **Longitude:** -85.280421      **IASNat Region:** 11B      **Topo:** G-66      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 4.515      **Gradient (ft/mile):** 19.859

## Sample Information

**SampleNumber:** AB38750      **EventID:** 19T015      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** TAF      **SampleTime:** 10:15:00 AM      **HydroLabNumber:** P5  
**WaterFlowType:** Riffle      **WaterAppearance:** Clear      **SkyConditions:** 3 - Partly      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 7.86      **pH:** 8.06      **WaterTemp(°C):** 23.4      **SpecificConductivity (µS/cm):** 391      **Turbidity (NTU):** 6.08  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 200      **Avg.StreamWidth(m):** 6      **DistanceFished (m):** 90  
**SecondsFished:** 418      **WaterDepthAvg (m):** .2      **WaterDepthMax (m):** .5      **TimeAtSite:** 00:50  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 63      **SubstrateScore (max20):** 16      **InstreamCover Score (max20):** 9      **ChannelMorphologyScore (max20):** 14  
**RiparianZoneBankErosion Score(max10):** 5      **Pool/GlideQualityScore(max12):** 5      **Riffle/RunQualityScore(max8):** 4  
**GradientScore (max10):** 10      **%Pool:** 20      **%Riffle:** 60      **%Run:** 20      **%Glide:** 0      **CanopyCover PctOpen:** <10%-Closed  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	10	3	%TolerantIndividuals:	25	3
Darter/Madtom/SculpinSpeciesCount:	4	5	%OmnivoreIndividuals:	6.06	5
%HeadwaterIndividuals:	6.82	1	%InsectivoreIndividuals:	55.3	5
MinnnowSpeciesCount:	5	5	%PioneerIndividuals:	87.12	1
SensitiveSpeciesCount:	1	1	Total # of Individuals (CPUE):	132	3
			%SimpleLithophilicInd.:	28.79	3
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>40</b>
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SampleNumber: AB38750

EventID: 19T015

LSite: OML060-0005

County: Ripley

StreamName: Tributary of Laughery Creek

LocationDescription: CR 1050 N

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluntnose Minnow	8					
Central Stoneroller	29					
Creek Chub	22					
Fantail Darter	9					
Green Sunfish	3					
Greenside Darter	7					
Johnny Darter	11					
Orangethroat Darter	37					
Silverjaw Minnow	5					
Striped Shiner	1					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060030      **LSite:** OML-05-0032  
**Site:** Walnut Fork      **Location:** CR 1300 N      **County:** Ripley  
**Latitude:** 39.264816      **Longitude:** -85.280048      **IASNat Region:** 11B      **Topo:** G-42      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 3.980      **Gradient (ft/mile):** 11.455

## Sample Information

**SampleNumber:** AB38751      **EventID:** 19T016      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** KAG      **SampleTime:** 12:45:00 PM      **HydroLabNumber:** P8  
**WaterFlowType:** Pool      **WaterAppearance:** Clear      **SkyConditions:** 3 - Partly      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 4.16      **pH:** 7.63      **WaterTemp(°C):** 22.8      **SpecificConductivity (µS/cm):** 491.4      **Turbidity (NTU):** 4.63  
**SpecialNotes:** very slow moving water

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 5      **DistanceFished (m):** 75  
**SecondsFished:** 779      **WaterDepthAvg (m):** .25      **WaterDepthMax (m):** .75      **TimeAtSite:** 01:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 55      **SubstrateScore (max20):** 14      **InstreamCover Score (max20):** 14      **ChannelMorphologyScore (max20):** 9  
**RiparianZoneBankErosion Score(max10):** 4      **Pool/GlideQualityScore(max12):** 6      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 8      **%Pool:** 20      **%Riffle:** 0      **%Run:** 0      **%Glide:** 80      **CanopyCover PctOpen:** <10%-Closed  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	13	5	<b>%TolerantIndividuals:</b>	39.08	3
<b>Darter/Madtom/SculpinSpeciesCount:</b>	4	5	<b>%OmnivoreIndividuals:</b>	4.6	5
<b>%HeadwaterIndividuals:</b>	1.53	1	<b>%InsectivoreIndividuals:</b>	42.53	3
<b>MinnnowSpeciesCount:</b>	5	5	<b>%PioneerIndividuals:</b>	88.12	1
<b>SensitiveSpeciesCount:</b>	1	1	<b>Total # of Individuals (CPUE):</b>	261	5
			<b>%SimpleLithophilicInd.:</b>	8.05	1
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>40</b>
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SampleNumber: AB38751

EventID: 19T016

LSite: OML-05-0032

County: Ripley

StreamName: Walnut Fork

LocationDescription: CR 1300 N

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	3					
Bluntnose Minnow	12					
Central Stoneroller	73					
Creek Chub	63					
Fantail Darter	4					
Green Sunfish	25					
Greenside Darter	2					
Johnny Darter	41					
Largemouth Bass	2					
Orangethroat Darter	3					
Silverjaw Minnow	13					
Striped Shiner	18					
Yellow Bullhead	2					





# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060030      **LSite:** OML060-0006  
**Site:** Laughery Creek      **Location:** CR 200 W      **County:** Ripley  
**Latitude:** 39.245778      **Longitude:** -85.291329      **IASNat Region:** 11C      **Topo:** G-66      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 30.815      **Gradient (ft/mile):** 4.427

## Sample Information

**SampleNumber:** AB38752      **EventID:** 19T017      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** TAF      **SampleTime:** 08:27:00 AM      **HydroLabNumber:** P5  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 4 - 61-75  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 6.31      **pH:** 7.9      **WaterTemp(°C):** 24.3      **SpecificConductivity (µS/cm):** 387      **Turbidity (NTU):** 5.19  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 200      **Avg.StreamWidth(m):** 10      **DistanceFished (m):** 150  
**SecondsFished:** 918      **WaterDepthAvg (m):** .2      **WaterDepthMax (m):** .9      **TimeAtSite:** 01:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** Started ~100ft US of bridge, bridge area very different than just US.

## Habitat Information

**TotalScore (max100):** 73      **SubstrateScore (max20):** 16      **InstreamCover Score (max20):** 15      **ChannelMorphologyScore (max20):** 17  
**RiparianZoneBankErosion Score(max10):** 6      **Pool/GlideQualityScore(max12):** 8      **Riffle/RunQualityScore(max8):** 5  
**GradientScore (max10):** 6      **%Pool:** 40      **%Riffle:** 30      **%Run:** 20      **%Glide:** 10      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	16	5	%TolerantIndividuals:	27.75	3
DarterSpeciesCount:	4	5	%OmnivoreIndividuals:	10.57	5
SunfishSpeciesCount:	3	3	%InsectivoreIndividuals:	70.04	5
SuckerSpeciesCount:	1	1	%CarnivoreIndividuals:	0.88	1
SensitiveSpeciesCount:	3	3	Total # of Individuals (CPUE):	227	3
			%SimpleLithophilicInd.:	6.61	1
			%Ind.withDELT:	0.44	3

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>38</b>
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SampleNumber: AB38752

EventID: 19T017

LSite: OML060-0006

County: Ripley

StreamName: Laughery Creek

LocationDescription: CR 200 W

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluntnose Minnow	15					
Central Stoneroller	21			1		
Creek Chub	21					
Fantail Darter	52					
Green Sunfish	14					
Greenside Darter	58					
Johnny Darter	9					
Largemouth Bass	1					
Longear Sunfish	15					
Orangethroat Darter	2					
Rock Bass	1					
Spotfin Shiner	1					
Striped Shiner	1					
Suckermouth Minnow	3					
White Sucker	9					
Yellow Bullhead	4					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060120      **LSite:** OML-05-0033  
**Site:** Plum Creek      **Location:** SR 350      **County:** Ripley  
**Latitude:** 39.147581      **Longitude:** -85.256122      **IASNat Region:** 11C      **Topo:** G-66      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 8.732      **Gradient (ft/mile):** 13.897

## Sample Information

**SampleNumber:** AB38753      **EventID:** 19T018      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** KRW      **SampleTime:** 03:15:00 PM      **HydroLabNumber:** P7  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 6 - > 86  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 0 - Calm  
**DissolvedO2 (mg/l):** 9.46      **pH:** 7.67      **WaterTemp(°C):** 23.6      **SpecificConductivity (µS/cm):** 996      **Turbidity (NTU):** 1.9  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 200      **Avg.StreamWidth(m):** 9      **DistanceFished (m):** 135  
**SecondsFished:** 699      **WaterDepthAvg (m):** .2      **WaterDepthMax (m):** .5      **TimeAtSite:** 01:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 67      **SubstrateScore (max20):** 18      **InstreamCover Score (max20):** 8      **ChannelMorphologyScore (max20):** 15  
**RiparianZoneBankErosion Score(max10):** 8      **Pool/GlideQualityScore(max12):** 5      **Riffle/RunQualityScore(max8):** 5  
**GradientScore (max10):** 8      **%Pool:** 30      **%Riffle:** 40      **%Run:** 30      **%Glide:** 0      **CanopyCover PctOpen:** 55%-<85%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	15	5	%TolerantIndividuals:	27.91	3
Darter/Madtom/SculpinSpeciesCount:	4	5	%OmnivoreIndividuals:	0.66	5
%HeadwaterIndividuals:	21.26	3	%InsectivoreIndividuals:	58.14	5
MinnnowSpeciesCount:	3	3	%PioneerIndividuals:	56.48	1
SensitiveSpeciesCount:	4	5	Total # of Individuals (CPUE):	301	5
			%SimpleLithophilicInd.:	9.63	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>46</b>
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SampleNumber: AB38753

EventID: 19T018

LSite: OML-05-0033

County: Ripley

StreamName: Plum Creek

LocationDescription: SR 350

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	15					
Central Stoneroller	59					
Creek Chub	57					
Fantail Darter	64					
Golden Redhorse	1					
Green Sunfish	18					
Greenside Darter	26					
Johnny Darter	18					
Largemouth Bass	4					
Northern Hog Sucker	4					
Orangethroat Darter	18					
Rock Bass	4					
Striped Shiner	4					
White Sucker	2					
Yellow Bullhead	7					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060110      **LSite:** OML-05-0042  
**Site:** Laughery Creek      **Location:** SR 350, Osgood Water Intake      **County:** Ripley  
**Latitude:** 39.149750      **Longitude:** -85.253722      **IASNat Region:** 11C      **Topo:** G-66      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 126.043      **Gradient (ft/mile):** 3.481

## Sample Information

**SampleNumber:** AB38754      **EventID:** 19T019      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/17/2019      **SurveyCrewChief:** TAF      **SampleTime:** 10:35:00 AM      **HydroLabNumber:** P5  
**WaterFlowType:** Glide      **WaterAppearance:** Murky      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 4 - 61-75  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 0 - Calm  
**DissolvedO2 (mg/l):** 7.51      **pH:** 8.01      **WaterTemp(°C):** 26.1      **SpecificConductivity (µS/cm):** 356.3      **Turbidity (NTU):** 22.8  
**SpecialNotes:**

**ElectrofishingEquipment:** Scanoe      **Voltage:** 250      **Avg.StreamWidth(m):** 28      **DistanceFished (m):** 420  
**SecondsFished:** 3600      **WaterDepthAvg (m):** 1      **WaterDepthMax (m):** 3      **TimeAtSite:** 02:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** Scanoe w/Boom MLES

## Habitat Information

**TotalScore (max100):** 64      **SubstrateScore (max20):** 10      **InstreamCover Score (max20):** 14      **ChannelMorphologyScore (max20):** 14  
**RiparianZoneBankErosion Score(max10):** 10      **Pool/GlideQualityScore(max12):** 8      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 8      **%Pool:** 30      **%Riffle:** 0      **%Run:** 70      **%Glide:** 0      **CanopyCover PctOpen:** 30%-<55%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	20	5	<b>%TolerantIndividuals:</b>	20.16	5
<b>DarterSpeciesCount:</b>	4	5	<b>%OmnivoreIndividuals:</b>	8.06	5
<b>SunfishSpeciesCount:</b>	4	5	<b>%InsectivoreIndividuals:</b>	74.19	5
<b>SuckerSpeciesCount:</b>	4	5	<b>%CarnivoreIndividuals:</b>	17.74	5
<b>SensitiveSpeciesCount:</b>	8	5	<b>Total # of Individuals (CPUE):</b>	124	1
			<b>%SimpleLithophilicInd.:</b>	27.42	3
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>54</b>
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SampleNumber: AB38754

EventID: 19T019

LSite: OML-05-0042

County: Ripley

StreamName: Laughery Creek

LocationDescription: SR 350, Osgood Water Intake

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	1					
Bluegill	33					
Bluntnose Minnow	5					
Channel Catfish	1					
Common Carp	3					
Fantail Darter	2					
Flathead Catfish	2					
Gizzard Shad	1					
Golden Redhorse	28					
Green Sunfish	13					
Greenside Darter	1					
Highfin Carpsucker	1					
Johnny Darter	1					
Largemouth Bass	4					
Logperch	2					
Longear Sunfish	8					
Northern Hog Sucker	2					
Rock Bass	10					
Spotted Bass	5					
Striped Shiner	1					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060130      **LSite:** OML-05-0034  
**Site:** Castators Creek      **Location:** SR 350      **County:** Ripley  
**Latitude:** 39.149898      **Longitude:** -85.243039      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 7.371      **Gradient (ft/mile):** 28.916

## Sample Information

**SampleNumber:** AB38755      **EventID:** 19T020      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** KRW      **SampleTime:** 05:30:00 PM      **HydroLabNumber:** P7  
**WaterFlowType:** Run      **WaterAppearance:** Murky      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 6 - > 86  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 0 - Calm  
**DissolvedO2 (mg/l):** 8.34      **pH:** 7.61      **WaterTemp(°C):** 22.1      **SpecificConductivity (µS/cm):** 306.4      **Turbidity (NTU):**  
**SpecialNotes:** forgot to run turbidity

**ElectrofishingEquipment:** Backpack      **Voltage:** 200      **Avg.StreamWidth(m):** 6      **DistanceFished (m):** 90  
**SecondsFished:** 600      **WaterDepthAvg (m):** .3      **WaterDepthMax (m):** .8      **TimeAtSite:** 01:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 64      **SubstrateScore (max20):** 13      **InstreamCover Score (max20):** 13      **ChannelMorphologyScore (max20):** 14  
**RiparianZoneBankErosion Score(max10):** 8      **Pool/GlideQualityScore(max12):** 6      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 10      **%Pool:** 40      **%Riffle:** 25      **%Run:** 35      **%Glide:** 0      **CanopyCover PctOpen:** <10%-Closed  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	21	5	%TolerantIndividuals:	34.66	3
Darter/Madtom/SculpinSpeciesCount:	6	5	%OmnivoreIndividuals:	23.62	5
%HeadwaterIndividuals:	5.83	1	%InsectivoreIndividuals:	44.48	3
MinnnowSpeciesCount:	5	3	%PioneerIndividuals:	59.82	1
SensitiveSpeciesCount:	5	5	Total # of Individuals (CPUE):	326	5
			%SimpleLithophilicInd.:	19.33	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>42</b>
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SampleNumber: AB38755

EventID: 19T020

LSite: OML-05-0034

County: Ripley

StreamName: Castators Creek

LocationDescription: SR 350

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Crappie	1					
Bluegill	9					
Bluntnose Minnow	55					
Central Stoneroller	70					
Creek Chub	29					
Fantail Darter	19					
Green Sunfish	4					
Greenside Darter	31					
Johnny Darter	13					
Largemouth Bass	2					
Logperch	1					
Northern Hog Sucker	2					
Orangethroat Darter	2					
Redear Sunfish	1					
Rock Bass	2					
Silverjaw Minnow	22					
Spotted Bass	1					
Stonecat	1					
Striped Shiner	36					
White Sucker	22					
Yellow Bullhead	3					





# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060140      **LSite:** OML-05-0012  
**Site:** Laughery Creek      **Location:** CR 450 N      **County:** Ripley  
**Latitude:** 39.140063      **Longitude:** -85.249622      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 142.604      **Gradient (ft/mile):** 3.481

## Sample Information

**SampleNumber:** AB38756      **EventID:** 19T021      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** KRW      **SampleTime:** 10:15:00 AM      **HydroLabNumber:** P7  
**WaterFlowType:** Glide      **WaterAppearance:** Murky      **SkyConditions:** 2 - Scattered      **AirTemperature:** 6 - > 86  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 0 - Calm  
**DissolvedO2 (mg/l):** 6.8      **pH:** 7.8      **WaterTemp(°C):** 24.8      **SpecificConductivity (µS/cm):** 423      **Turbidity (NTU):** 14.1  
**SpecialNotes:**

**ElectrofishingEquipment:** Canoe      **Voltage:** 230      **Avg.StreamWidth(m):** 25      **DistanceFished (m):** 375  
**SecondsFished:** 2948      **WaterDepthAvg (m):** .5      **WaterDepthMax (m):** 1      **TimeAtSite:** 03:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** w/MLES

## Habitat Information

**TotalScore (max100):** 72      **SubstrateScore (max20):** 15      **InstreamCover Score (max20):** 15      **ChannelMorphologyScore (max20):** 13  
**RiparianZoneBankErosion Score(max10):** 6      **Pool/GlideQualityScore(max12):** 9      **Riffle/RunQualityScore(max8):** 6  
**GradientScore (max10):** 8      **%Pool:** 20      **%Riffle:** 10      **%Run:** 70      **%Glide:** 0      **CanopyCover PctOpen:** 30%-<55%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	30	5	<b>%TolerantIndividuals:</b>	6.91	5
<b>DarterSpeciesCount:</b>	5	5	<b>%OmnivoreIndividuals:</b>	3.28	5
<b>SunfishSpeciesCount:</b>	5	5	<b>%InsectivoreIndividuals:</b>	86.53	5
<b>SuckerSpeciesCount:</b>	5	5	<b>%CarnivoreIndividuals:</b>	7.08	3
<b>SensitiveSpeciesCount:</b>	12	5	<b>Total # of Individuals (CPUE):</b>	579	5
			<b>%SimpleLithophilicInd.:</b>	17.27	1
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>54</b>
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SampleNumber: AB38756

EventID: 19T021

LSite: OML-05-0012

County: Ripley

StreamName: Laughery Creek

LocationDescription: CR 450 N

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	4					
Bluegill	119					
Bluntnose Minnow	17					
Brindled Madtom	1					
Central Stoneroller	16					
Fantail Darter	36					
Golden Redhorse	16					
Green Sunfish	19					
Greenside Darter	54					
Johnny Darter	5					
Largemouth Bass	13					
Logperch	8					
Longear Sunfish	125					
Northern Hog Sucker	28					
Quillback	1					
Redear Sunfish	7					
Rock Bass	23					
Scarlet Shiner	2					
Silver Shiner	4					
Silverjaw Minnow	19					
Slenderhead Darter	1					
Smallmouth Bass	1					
Spotfin Shiner	3					
Spotted Bass	4					
Steelcolor Shiner	13					
Stonecat	1					
Striped Shiner	31					
Suckermouth Minnow	5					
White Sucker	1					
Yellow Bullhead	2					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060050      **LSite:** OML-05-0035  
**Site:** Trib of Little Laughery Cr      **Location:** Huntersville Rd      **County:** Franklin  
**Latitude:** 39.307267      **Longitude:** -85.234772      **IASNat Region:** 11B      **Topo:** G-43      **Segment:** 88  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 3.482      **Gradient (ft/mile):** 15.1

## Sample Information

**SampleNumber:** AB38757      **EventID:** 19T022      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/15/2019      **SurveyCrewChief:** KAG      **SampleTime:** 04:45:00 PM      **HydroLabNumber:** P8  
**WaterFlowType:** Pool      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 6 - > 86  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 6.71      **pH:** 7.81      **WaterTemp(°C):** 25.7      **SpecificConductivity (µS/cm):** 569      **Turbidity (NTU):** 2.28  
**SpecialNotes:** Sample reach moved DS of bridge due to dam US of bridge

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 4      **DistanceFished (m):** 60  
**SecondsFished:** 676      **WaterDepthAvg (m):** .2      **WaterDepthMax (m):** 1      **TimeAtSite:** 01:15  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** Reach DS of bridge due to dam US of bridge

## Habitat Information

**TotalScore (max100):** 60      **SubstrateScore (max20):** 13      **InstreamCover Score (max20):** 11      **ChannelMorphologyScore (max20):** 11  
**RiparianZoneBankErosion Score(max10):** 5      **Pool/GlideQualityScore(max12):** 10      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 10      **%Pool:** 70      **%Riffle:** 30      **%Run:** 0      **%Glide:** 0      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	16	5	<b>%TolerantIndividuals:</b>	36.18	3
<b>Darter/Madtom/SculpinSpeciesCount:</b>	4	5	<b>%OmnivoreIndividuals:</b>	15.58	5
<b>%HeadwaterIndividuals:</b>	7.54	1	<b>%InsectivoreIndividuals:</b>	58.79	5
<b>MinnnowSpeciesCount:</b>	6	5	<b>%PioneerIndividuals:</b>	53.27	1
<b>SensitiveSpeciesCount:</b>	4	5	<b>Total # of Individuals (CPUE):</b>	199	5
			<b>%SimpleLithophilicInd.:</b>	5.03	1
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>46</b>
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SampleNumber: AB38757

EventID: 19T022

LSite: OML-05-0035

County: Franklin

StreamName: Trib of Little Laughery Cr

LocationDescription: Huntersville Rd

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	47					
Bluntnose Minnow	24					
Central Stoneroller	23					
Creek Chub	26					
Fantail Darter	15					
Green Sunfish	8					
Greenside Darter	10					
Johnny Darter	17					
Largemouth Bass	2					
Logperch	1					
Longear Sunfish	2					
Silver Shiner	1					
Silverjaw Minnow	8					
Striped Shiner	1					
White Sucker	7					
Yellow Bullhead	7					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060080      **LSite:** OML-05-0036  
**Site:** Trib of Ripley Cr      **Location:** CR 950 N      **County:** Ripley  
**Latitude:** 39.209614      **Longitude:** -85.195244      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 3.229      **Gradient (ft/mile):** 13.96

## Sample Information

**SampleNumber:** AB38758      **EventID:** 19T023      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** KAG      **SampleTime:** 09:40:00 AM      **HydroLabNumber:** P8  
**WaterFlowType:** Pool      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 2 - Mod./Light  
**DissolvedO2 (mg/l):** 5.22      **pH:** 7.72      **WaterTemp(°C):** 22.7      **SpecificConductivity (µS/cm):** 476.7      **Turbidity (NTU):** 11.1  
**SpecialNotes:** Stream very shallow for several meters; almost isolated pools.

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 2      **DistanceFished (m):** 50  
**SecondsFished:** 354      **WaterDepthAvg (m):** .1      **WaterDepthMax (m):** .5      **TimeAtSite:** 01:00  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 49      **SubstrateScore (max20):** 15      **InstreamCover Score (max20):** 9      **ChannelMorphologyScore (max20):** 10  
**RiparianZoneBankErosion Score(max10):** 5      **Pool/GlideQualityScore(max12):** 2      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 8      **%Pool:** 50      **%Riffle:** 0      **%Run:** 50      **%Glide:** 0      **CanopyCover PctOpen:** <10%-Closed  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	12	5	%TolerantIndividuals:	53.5	1
Darter/Madtom/SculpinSpeciesCount:	3	5	%OmnivoreIndividuals:	24.84	5
%HeadwaterIndividuals:	7.01	1	%InsectivoreIndividuals:	42.68	3
MinnnowSpeciesCount:	5	5	%PioneerIndividuals:	72.61	1
SensitiveSpeciesCount:	1	1	Total # of Individuals (CPUE):	157	5
			%SimpleLithophilicInd.:	15.29	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>38</b>
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SampleNumber: AB38758

EventID: 19T023

LSite: OML-05-0036

County: Ripley

StreamName: Trib of Ripley Cr

LocationDescription: CR 950 N

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	5					
Bluntnose Minnow	23					
Central Stoneroller	11					
Creek Chub	40					
Fantail Darter	11					
Green Sunfish	5					
Greenside Darter	1					
Johnny Darter	18					
Redear Sunfish	2					
Silverjaw Minnow	17					
Striped Shiner	8					
White Sucker	16					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060070      **LSite:** OML-05-0040  
**Site:** Trib of Ripley Cr      **Location:** N Spades Rd      **County:** Ripley  
**Latitude:** 39.203158      **Longitude:** -85.132117      **IASNat Region:** 11B      **Topo:** G-67      **Segment:** 99  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 3.944      **Gradient (ft/mile):** 13.963

## Sample Information

**SampleNumber:** AB38759      **EventID:** 19T027      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 07/16/2019      **SurveyCrewChief:** KAG      **SampleTime:** 08:33:00 AM      **HydroLabNumber:** P8  
**WaterFlowType:** Run      **WaterAppearance:** Clear      **SkyConditions:** 4 - Cloudy      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 7.46      **pH:** 8.02      **WaterTemp(°C):** 21.9      **SpecificConductivity (µS/cm):** 547      **Turbidity (NTU):** 5.28  
**SpecialNotes:**

**ElectrofishingEquipment:** Backpack      **Voltage:** 250      **Avg.StreamWidth(m):** 3      **DistanceFished (m):** 50  
**SecondsFished:** 289      **WaterDepthAvg (m):** .1      **WaterDepthMax (m):** .2      **TimeAtSite:** 00:45  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 53      **SubstrateScore (max20):** 16      **InstreamCover Score (max20):** 7      **ChannelMorphologyScore (max20):** 13  
**RiparianZoneBankErosion Score(max10):** 6      **Pool/GlideQualityScore(max12):** 3      **Riffle/RunQualityScore(max8):** 0  
**GradientScore (max10):** 8      **%Pool:** 20      **%Riffle:** 0      **%Run:** 80      **%Glide:** 0      **CanopyCover PctOpen:** <10%-Closed  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	7	3	%TolerantIndividuals:	49.37	3
Darter/Madtom/SculpinSpeciesCount:	3	5	%OmnivoreIndividuals:	1.27	5
%HeadwaterIndividuals:	0	1	%InsectivoreIndividuals:	53.16	5
MinnnowSpeciesCount:	3	3	%PioneerIndividuals:	98.73	1
SensitiveSpeciesCount:	1	1	Total # of Individuals (CPUE):	79	1
			%SimpleLithophilicInd.:	8.86	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>34</b>
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SampleNumber: AB38759

EventID: 19T027

LSite: OML-05-0040

County: Ripley

StreamName: Trib of Ripley Cr

LocationDescription: N Spades Rd

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluntnose Minnow	1					
Creek Chub	36					
Green Sunfish	2					
Greenside Darter	1					
Johnny Darter	24					
Orangethroat Darter	7					
Silverjaw Minnow	8					





# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060140      **LSite:** OML-05-0012  
**Site:** Laughery Creek      **Location:** CR 450 N      **County:** Ripley  
**Latitude:** 39.140063      **Longitude:** -85.249622      **IASNat Region:** 11C      **Topo:** G-67      **Segment:** 93  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 142.604      **Gradient (ft/mile):** 3.481

## Sample Information

**SampleNumber:** AB40043      **EventID:** 19T021.5      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 08/14/2019      **SurveyCrewChief:** TAF      **SampleTime:** 08:15:00 AM      **HydroLabNumber:** P5  
**WaterFlowType:** Glide      **WaterAppearance:** Murky      **SkyConditions:** 3 - Partly      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 5.09      **pH:** 7.59      **WaterTemp(°C):** 23.7      **SpecificConductivity (µS/cm):** 462.6      **Turbidity (NTU):** 6.38  
**SpecialNotes:**

**ElectrofishingEquipment:** Canoe      **Voltage:** 230      **Avg.StreamWidth(m):** 25      **DistanceFished (m):** 375  
**SecondsFished:** 2715      **WaterDepthAvg (m):** .25      **WaterDepthMax (m):** 1      **TimeAtSite:** 02:45  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:** canoe w/MLES

## Habitat Information

**TotalScore (max100):** 75      **SubstrateScore (max20):** 15      **InstreamCover Score (max20):** 17      **ChannelMorphologyScore (max20):** 15  
**RiparianZoneBankErosion Score(max10):** 4      **Pool/GlideQualityScore(max12):** 10      **Riffle/RunQualityScore(max8):** 6  
**GradientScore (max10):** 8      **%Pool:** 40      **%Riffle:** 15      **%Run:** 45      **%Glide:** 0      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	28	5	%TolerantIndividuals:	14.46	5
DarterSpeciesCount:	5	5	%OmnivoreIndividuals:	9.82	5
SunfishSpeciesCount:	4	5	%InsectivoreIndividuals:	77.32	5
SuckerSpeciesCount:	4	5	%CarnivoreIndividuals:	11.61	5
SensitiveSpeciesCount:	10	5	Total # of Individuals (CPUE):	560	5
			%SimpleLithophilicInd.:	16.07	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>56</b>
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SampleNumber: AB40043

EventID: 19T021.5

LSite: OML-05-0012

County: Ripley

StreamName: Laughery Creek

LocationDescription: CR 450 N

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	4					
Bluegill	90					
Bluntnose Minnow	51					
Brindled Madtom	2					
Central Stoneroller	3					
Channel Catfish	5					
Creek Chub	2					
Fantail Darter	44					
Golden Redhorse	22					
Green Sunfish	15					
Greenside Darter	45					
Johnny Darter	18					
Largemouth Bass	14					
Logperch	10					
Longear Sunfish	118					
Northern Hog Sucker	29					
Orangethroat Darter	1					
Rock Bass	43					
Scarlet Shiner	2					
Silver Shiner	2					
Spotfin Shiner	3					
Spotted Bass	3					
Stonecat	9					
Striped Shiner	9					
Suckermouth Minnow	7					
Western Mosquitofish	1					
White Sucker	4					
Yellow Bullhead	4					



Indiana Department of Environmental Management  
Fish Community Assessments

**Site Information**

SubBasin: Middle Ohio-Laughery      14 digit HUC: 05090203060100      LSite: OML-05-0030  
 Site: Laughery Creek      Location: SR 48      County: Ripley  
 Latitude: 39.197305      Longitude: -85.247507      IASNat Region: 11C      Topo: G-67      Segment: 93  
 Ecoregion: Eastern Corn Belt Plains      Drainage Area (sq.miles): 115.769      Gradient (ft/mile): 2.896

**Sample Information**

SampleNumber: AB40044      EventID: 19T012.5      Sample MediumCollected: Fish Community + Water  
 SampleDate: 08/13/2019      SurveyCrewChief: TAF      SampleTime: 03:03:00 PM      HydroLabNumber: P5  
 WaterFlowType: Run      WaterAppearance: Clear      SkyConditions: 3 - Partly      AirTemperature: 5 - 76-85  
 WindDirection: 27 - West (270 degrees)      WindStrength: 1 - Light  
 DissolvedO2 (mg/l): 7.65      pH: 7.7      WaterTemp(°C): 25.1      SpecificConductivity (µS/cm): 459      Turbidity (NTU): 4.39  
 SpecialNotes:

ElectrofishingEquipment: Canoe      Voltage: 250      Avg.StreamWidth(m): 17      DistanceFished (m): 255  
 SecondsFished: 1662      WaterDepthAvg (m): .25      WaterDepthMax (m): .7      TimeAtSite: 02:20  
 BridgeInReach:       ReachRepresentative:       WhyReachNotRepresentative:  
 SpecialComments: w/MLES

**Habitat Information**

TotalScore (max100): 74      SubstrateScore (max20): 16      InstreamCover Score (max20): 16      ChannelMorphologyScore (max20): 14  
 RiparianZoneBankErosion Score(max10): 7      Pool/GlideQualityScore(max12): 7      Riffle/RunQualityScore(max8): 6  
 GradientScore (max10): 8      %Pool: 40      %Riffle: 10      %Run: 50      %Glide: 0      CanopyCover PctOpen: 55%<-85%  
 SubjectiveRating:      AestheticRating:      NOTES: "NEW RECORD"

**Fish Community Index of Biotic Integrity (IBI) Information**

Calibration Used: Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	23	5	%TolerantIndividuals:	9.78	5
DarterSpeciesCount:	5	5	%OmnivoreIndividuals:	6.31	5
SunfishSpeciesCount:	5	5	%InsectivoreIndividuals:	87.38	5
SuckerSpeciesCount:	5	5	%CarnivoreIndividuals:	6.31	3
SensitiveSpeciesCount:	9	5	Total # of Individuals (CPUE):	317	3
			%SimpleLithophilicInd.:	37.54	3
			%Ind.withDELT:	0.32	3

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	52
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SampleNumber: AB40044

EventID: 19T012.5

LSite: OML-05-0030

County: Ripley

StreamName: Laughery Creek

LocationDescription: SR 48

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Black Redhorse	15					
Blackside Darter	3					
Bluegill	31					
Bluntnose Minnow	9					
Brindled Madtom	1					
Fantail Darter	4					
Gizzard Shad	5					
Golden Redhorse	54					
Green Sunfish	9					
Greenside Darter	16					
Johnny Darter	14					
Largemouth Bass	1					
Logperch	9					
Longear Sunfish	86	1				
Northern Hog Sucker	27					
Redear Sunfish	1					
Rock Bass	8					
Silver Shiner	1					
Spotted Bass	11					
Spotted Sucker	1					
Striped Shiner	3					
White Sucker	6					
Yellow Bullhead	2					



# Indiana Department of Environmental Management Fish Community Assessments

## Site Information

**SubBasin:** Middle Ohio-Laughery      **14 digit HUC:** 05090203060050      **LSite:** OML-05-0035  
**Site:** Trib of Little Laughery Cr      **Location:** Huntersville Rd      **County:** Franklin  
**Latitude:** 39.307267      **Longitude:** -85.234772      **IASNat Region:** 11B      **Topo:** G-43      **Segment:** 88  
**Ecoregion:** Eastern Corn Belt Plains      **Drainage Area (sq.miles):** 3.482      **Gradient (ft/mile):** 15.1

## Sample Information

**SampleNumber:** AB40045      **EventID:** 19T022.5      **Sample MediumCollected:** Fish Community + Water  
**SampleDate:** 08/14/2019      **SurveyCrewChief:** TAF      **SampleTime:** 11:30:00 AM      **HydroLabNumber:** P5  
**WaterFlowType:** Riffle      **WaterAppearance:** Clear      **SkyConditions:** 1 - Clear      **AirTemperature:** 5 - 76-85  
**WindDirection:** 27 - West (270 degrees)      **WindStrength:** 1 - Light  
**DissolvedO2 (mg/l):** 5.56      **pH:** 7.66      **WaterTemp(°C):** 24.4      **SpecificConductivity (µS/cm):** 322      **Turbidity (NTU):** 3.84  
**SpecialNotes:** Sampled DS of bridge due to US dam

**ElectrofishingEquipment:** Backpack      **Voltage:** 200      **Avg.StreamWidth(m):** 3      **DistanceFished (m):** 50  
**SecondsFished:** 818      **WaterDepthAvg (m):** .25      **WaterDepthMax (m):** .5      **TimeAtSite:** 01:30  
**BridgeInReach:**       **ReachRepresentative:**       **WhyReachNotRepresentative:**  
**SpecialComments:**

## Habitat Information

**TotalScore (max100):** 53      **SubstrateScore (max20):** 6      **InstreamCover Score (max20):** 11      **ChannelMorphologyScore (max20):** 10  
**RiparianZoneBankErosion Score(max10):** 5      **Pool/GlideQualityScore(max12):** 6      **Riffle/RunQualityScore(max8):** 5  
**GradientScore (max10):** 10      **%Pool:** 40      **%Riffle:** 30      **%Run:** 30      **%Glide:** 0      **CanopyCover PctOpen:** 10%-<30%  
**SubjectiveRating:**      **AestheticRating:**      **NOTES:** "NEW RECORD"

## Fish Community Index of Biotic Integrity (IBI) Information

**Calibration Used:** Eastern Corn Belt Plains

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
<b>SpeciesCount:</b>	15	5	<b>%TolerantIndividuals:</b>	34.7	3
<b>Darter/Madtom/SculpinSpeciesCount:</b>	4	5	<b>%OmnivoreIndividuals:</b>	7.46	5
<b>%HeadwaterIndividuals:</b>	2.99	1	<b>%InsectivoreIndividuals:</b>	43.28	3
<b>MinnnowSpeciesCount:</b>	5	5	<b>%PioneerIndividuals:</b>	69.78	1
<b>SensitiveSpeciesCount:</b>	2	3	<b>Total # of Individuals (CPUE):</b>	268	5
			<b>%SimpleLithophilicInd.:</b>	1.87	1
			<b>%Ind.withDELT:</b>	0	5

Metrics are dependent on Ecoregion and Drainage Area.  
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

<b>Total IBI Score (min 0, max 60)</b>	<b>42</b>
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SampleNumber: AB40045

EventID: 19T022.5

LSite: OML-05-0035

County: Franklin

StreamName: Trib of Little Laughery Cr

LocationDescription: Huntersville Rd

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	39					
Bluntnose Minnow	18					
Central Stoneroller	84					
Creek Chub	46					
Fantail Darter	8					
Green Sunfish	10					
Greenside Darter	10					
Johnny Darter	23					
Largemouth Bass	2					
Longear Sunfish	2					
Orangethroat Darter	2					
Silverjaw Minnow	4					
Striped Shiner	1					
White Sucker	2					
Yellow Bullhead	17					