

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Atlantic Sturgeon

*Acipenser oxyrinchus*

FISH

Freshwater Fish



Photo: Duane Raver USFWS



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Western Atlantic: Hamilton River, Labrador, Newfoundland, Canada to northeastern Florida, USA. Occurs occasionally in Bermuda and French Guiana. Northern Gulf of Mexico. In Europe: Baltic Sea. Landlocked populations in Lakes Ladoga and Onega (Russia), both now extirpated. Occasionally recorded from Great Britain and North Sea in Elbe drainage. This species is listed as endangered.

Habitat Community: River, Type: Warm Water

### ***Status***

CITES: I, II. IUCN Rank: NT. STSTAT: SH. SRANK: SH. GRANK: G3. RSGCN: H-VH. Climate Change Vulnerability: High=2030 (Temperature change)

### ***Threats and Actions***

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#### **Threat 1 - Biological resource use; Fishing impacting population sustainability**

*Actions:* • *Species management; Create management plans to restore runs and prevent bycatch. Rank: 3*

#### **Threat 2 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

*Actions:* • *Policies and regulations; Create regulations to prevent or encourage lower bycatch. Rank: 3*  
• *Compliance and enforcement; Provide enforcement with resources to enforce protective regulations. Rank: 3*

#### **Threat 3 - Fishing and harvesting aquatic resources; Harvested for food as well as for roe, and captured as bycatch**

*Actions:* • *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 2*

**Refer to the Community: River, Type: Warm Water - Habitat Profile for additional threats to this species.**

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## Blueback Herring

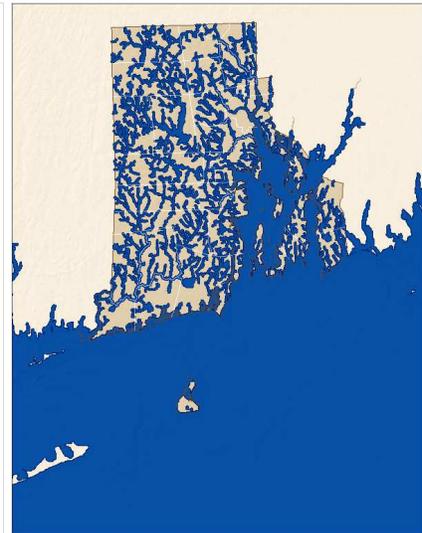
*Alosa aestivalis*

FISH

Freshwater Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

This native, anadromous species was found in a few streams and ponds in the Pawcatuck, Saugatucket, and Hunt Rivers. Both adult and young-of-the-year blueback herring were collected. Blueback herring range along Atlantic Coast drainages from Maine to Florida. Because of their similarity in appearance, blueback herring and alewives are collectively referred to as river herring. A decline in the population of these commercially important fish has, at the present time, resulted in the season being closed to the harvest of these species in Rhode Island's marine and freshwaters (Libby, 2013).

Habitat Community: River, Type: Warm Water

### **Status**

SRANK: S1. GRANK: G3G4. NALCC: AN. NAWCA: 1. USSCP: 1. Climate Change Vulnerability: Medium=2050 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Dams and water management/use; Dams block passage, impacts water quantity and quality in streams for use as river herring habitat**

- Actions:
- Resource and habitat protection; Remove dams, create passage in areas where dams can't be removed, prevent new obstructions from being created. Rank: 3
  - Habitat and natural process restoration; Remove dams to restore natural flow. Rank: 3
  - Species reintroduction; Stock adults from neighboring healthy runs to reestablish. Rank: 3

#### **Threat 2 - Fishing and harvesting aquatic resources; Bycatch in herring and whiting fishery**

- Actions:
- Species management; Continue developing management plans to restore runs and prevent bycatch. Rank: 3
  - Policies and regulations; Create regulations to prevent or encourage lower bycatch. Rank: 2
  - Compliance and enforcement; Provide enforcement with resources to enforce protective regulations. Rank: 3

#### **Threat 3 - Problematic native species; predation by multiple species (cormorants, striped bass, etc.)**

- Actions:
- Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 3

#### **Threat 4 - Household sewage and urban waste water; Water quality impacts to habitats**

- Actions:
- Land/water management; Address impacts of stormwater runoff and pollution discharge. Rank: 2

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**Threat 5 - Biological resource use; Demographic changes from incidental take (human)**

- Actions:* • *Education and awareness; Develop and provide educational program/materials to reduce incidental mortality and take from humans. Rank: 2*

***Refer to the Community: River, Type: Warm Water - Habitat Profile for additional threats to this species.***

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## Alewife

*Alosa pseudoharengus*

FISH

Freshwater Fish

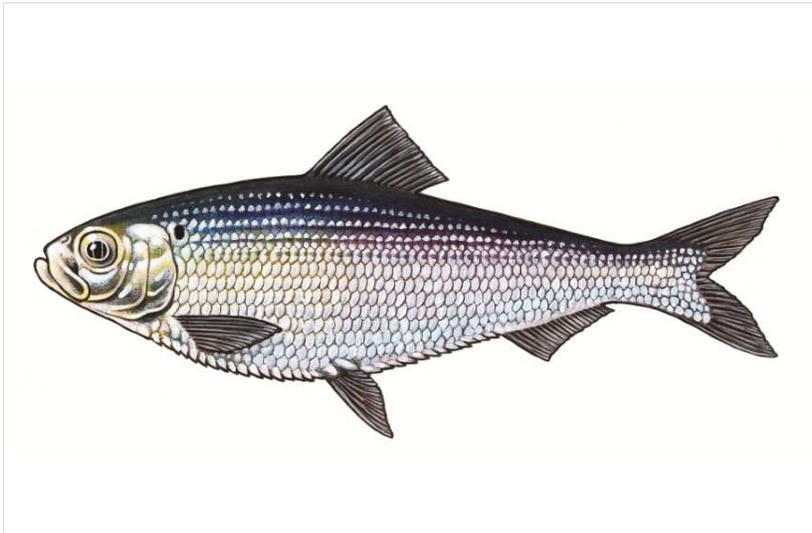
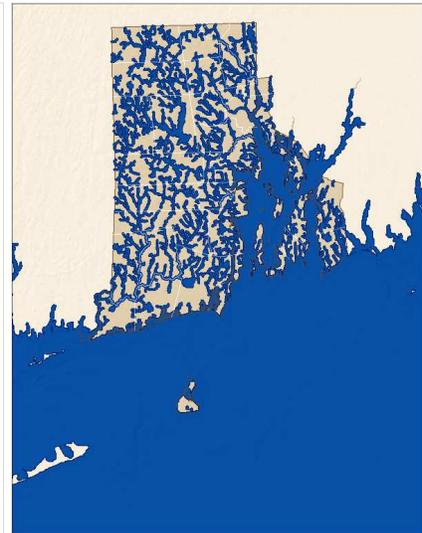


Photo: Robert Golder



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

According to Libby (2013) the alewife is a native, anadromous species that was collected in the streams and ponds of several watersheds. Landlocked populations were also collected in Hundred Acre Pond, Beach Pond, and Wallum Lake. The landlocked population found in Hundred Acre Pond was first reported in the 1950s by Saila and Horten. The populations in Beach Pond and Wallum Lake were established in the 1960s when they were stocked to provide a forage base for a program to produce trophy-sized salmonids. Although not collected during the present survey, alewives were collected in earlier surveys of Stafford Pond. In North America alewives range along the Atlantic Coast from Labrador to South Carolina, and into the St. Lawrence River and Great Lakes. Because of their similarity in appearance, alewives and blueback herring are collectively referred to as river herring. A decline in the population of these commercially important fish has, at the present time, resulted in the season being closed to the harvest of these species in Rhode Island's marine and freshwaters (Libby 2013).

Habitat Community: River, Type: Warm Water

### **Status**

SRANK: S3. GRANK: G5. STATE: X. NALCC: AN. USSCP: 1. Climate Change Vulnerability: Medium=2050 (Temperature change)

### **Threats and Actions**

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#### **Threat 1 - Dams and water management/use; Dams block passage, impacts water quantity and quality in streams for use as river herring habitat**

- Actions:
- *Resource and habitat protection; Remove dams, create passage in areas where dams can't be removed, prevent new obstructions from being created. Rank: 3*
  - *Habitat and natural process restoration; Remove dams to restore natural flow. Rank: 3*
  - *Species reintroduction; Stock adults from neighboring healthy runs to reestablish. Rank: 3*

#### **Threat 2 - Fishing and harvesting aquatic resources; Bycatch in herring and whiting fishery**

- Actions:
- *Species management; Continue developing management plans to restore runs and prevent bycatch. Rank: 3*
  - *Policies and regulations; Create regulations to prevent or encourage lower bycatch. Rank: 2*
  - *Compliance and enforcement; Provide enforcement with resources to enforce protective regulations. Rank: 3*

#### **Threat 3 - Problematic native species; predation by multiple species (cormorants, striped bass, etc.)**

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*Actions:* • *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 3*

**Threat 4 - Household sewage and urban waste water; Water quality impacts to habitats**

*Actions:* • *Land/water management; Address impacts of stormwater runoff and pollution discharge. Rank: 2*

**Threat 5 - Biological resource use; Demographic changes from incidental take (human)**

*Actions:* • *Education and awareness; Develop and provide educational program/materials to reduce incidental mortality and take from humans. Rank: 2*

***Refer to the Community: River, Type: Warm Water - Habitat Profile for additional threats to this species.***

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## American Shad

*Alosa sapidissima*

**FISH**

Freshwater Fish

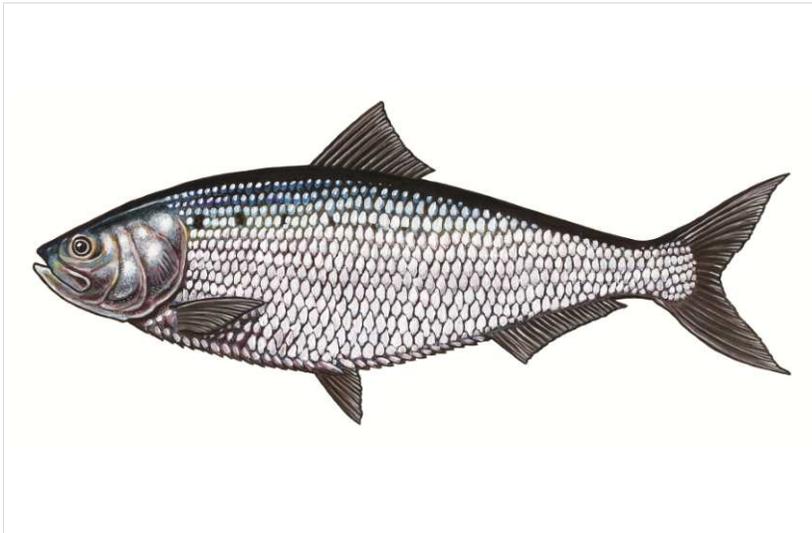
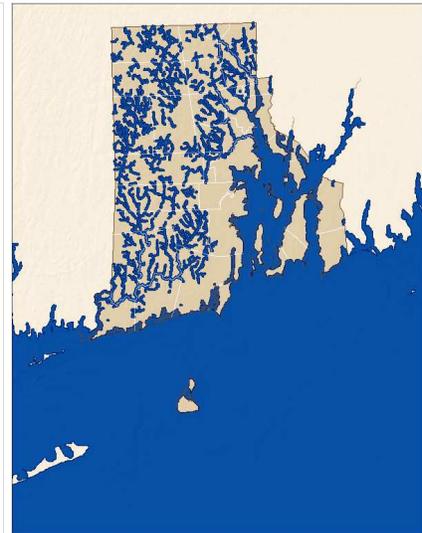


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

The American shad is a native, anadromous species that was only collected in the lower Pawcatuck River. However, American shad have been collected elsewhere in the coastal waters of Rhode Island. American shad occur along Atlantic Coast drainages from Labrador south to Florida and west into the St. Lawrence River, overwintering offshore in the Middle Atlantic region of the US. It has also been introduced to the Pacific Coast of the United States. The harvest of American shad is strictly regulated because of a decline in the population of this commercially important species. At the present time, the season is closed on the taking of this species in Rhode Island's marine and freshwaters (Libby, 2013).

Habitat Community: River, Type: Warm Water

### **Status**

SRANK: S1. GRANK: G5. STATE: X. RSGCN: L-VH. NALCC: AN. NAWCA: 1. USSCP: 1. Climate Change Vulnerability: Medium=2050 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Dams and water management/use; Dams block passage, impacts water quantity and quality in streams for use as river herring habitat**

- Actions:
- Resource and habitat protection; Remove dams, create passage in areas where dams can't be removed, prevent new obstructions from being created. Rank: 3
  - Habitat and natural process restoration; Remove dams to restore natural flow. Rank: 3
  - Species reintroduction; Stock adults from neighboring healthy runs to reestablish. Rank: 3

#### **Threat 2 - Fishing and harvesting aquatic resources; Bycatch in herring and whiting fishery**

- Actions:
- Species management; Continue developing management plans to restore runs and prevent bycatch. Rank: 3
  - Policies and regulations; Create regulations to prevent or encourage lower bycatch. Rank: 2
  - Compliance and enforcement; Provide enforcement with resources to enforce protective regulations. Rank: 3

#### **Threat 3 - Problematic native species; predation by multiple species (cormorants, striped bass, etc.)**

- Actions:
- Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 3

#### **Threat 4 - Household sewage and urban waste water; Water quality impacts to habitats**

- Actions:
- Land/water management; Address impacts of stormwater runoff and pollution discharge.

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*Rank: 2*

**Threat 5 - Biological resource use; Demographic changes from incidental take (human)**

- Actions:*
- *Education and awareness; Develop and provide educational program/materials to reduce incidental mortality and take from humans. Rank: 2*

*Refer to the Community: River, Type: Warm Water - Habitat Profile for additional threats to this species.*

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## American Eel

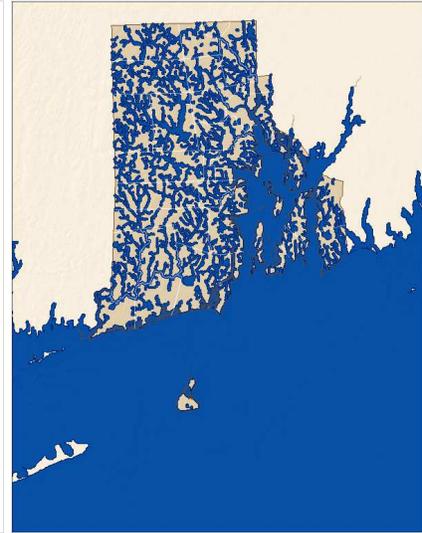
*Anguilla rostrata*

FISH

Freshwater Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

A catadromous species, the American eel was the most widely distributed species collected by Libby (2013), occurring in more than 52 percent of the locations sampled, in all ten drainages, and in both lotic and lentic environments. Dams appear to have significantly limited their distribution in the Blackstone, Ten Mile, and Pawtuxet River drainages. Numerous surveys in Wilson Reservoir and Echo Lake show that a few American eels have successfully migrated into the upper reaches of the Blackstone. This native fish is distributed along Atlantic and Gulf Coast drainages from Labrador to South America, the islands of the Caribbean, and the Great Lakes and St. Lawrence River drainages. Upon reaching maturity, an adult eel migrates downstream to the ocean where it makes its way to the Sargasso Sea to spawn (females may lay as many as two million eggs). After hatching the young eels drift northward, undergoing a series of developmental stages. In the spring the young eels enter estuaries where they may remain or continue with their upstream migration. The young eels may take several years (7 to 20) to mature before migrating back to sea. Female eels grow larger and mature later than males. Eels are nocturnal, bottom-dwelling predators that feed on a variety of invertebrates and fish as well as on dead animal matter. They are an important prey species for such sport fish as bluefish and striped bass and for many bird species. Overfishing and habitat degradation (e.g., dams and water quality) are attributed to the decline in its abundance. A number of measures such as eel ramps and harvest regulations are in place in an attempt to rebuild stocks (Libby, 2013).

Habitat Community: River

### **Status**

SRANK: S5. GRANK: G4. STATE: X. RSGCN: L-VH. NALCC: CA. NAWCA: 1. USSCP: 1. Climate Change Vulnerability: High=2030 (Temperature change)

### **Threats and Actions**

**Threat 1 - Dams and water management/use; Dams block passage, impacts water quantity in streams as well; Issues with entrainment in power plants**

- Actions:
- *Resource and habitat protection; Remove dams, create passage in areas where dams can't be removed, prevent new obstructions from being created, require power plants to monitor entrainment issue and mitigate as necessary. Rank: 3*
  - *Habitat and natural process restoration; Remove dams to restore natural flow. Rank: 3*

**Threat 2 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Create management plans to restore runs and prevent harvest of critical life stages. Rank: 3*

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- *Species reintroduction; Promote culturing to protect returning eels. Rank: 1*
- *Policies and regulations; Implement the management plan. Rank: 3*
- *Compliance and enforcement; Regulate and enforce harvest restrictions/regulations. Rank: 3*

**Threat 3 - Household sewage and urban waste water; Water quality impacts to habitats**

- Actions:*
- *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 2*

**Threat 4 - Fishing and harvesting aquatic resources; Demographic changes from incidental take (human)**

- Actions:*
- *Education and awareness; Develop and provide educational program/materials to reduce incidental mortality and take from humans. Rank: 2*
  - *Law and policy; Coordinate incidental take programs with regional or national initiatives. Rank: 2*

**Threat 5 - Lack of information**

- Actions:*
- *Data collection and analysis; Assess the recruitment of eels into and out of lakes by monitoring their migration out of freshwater. Rank: 2*

**Threat 6 - Lack of information**

- Actions:*
- *Research, survey, inventory, monitor populations; Monitor the population and abundance of eels over their life span, gathering life history data and identifying other research needs. Rank: 2*

**Refer to the Community: River - Habitat Profile for additional threats to this species.**

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**Weakfish**

*Cynoscion regalis*

**FISH**

Freshwater Fish

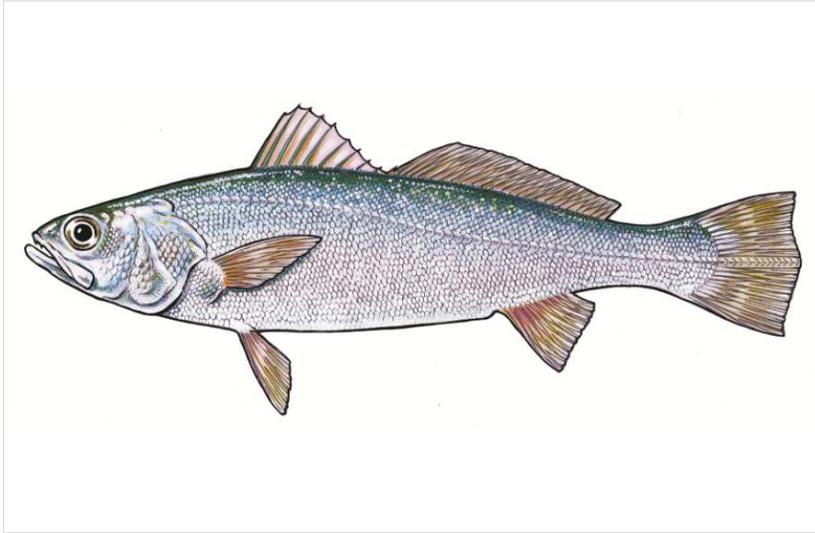
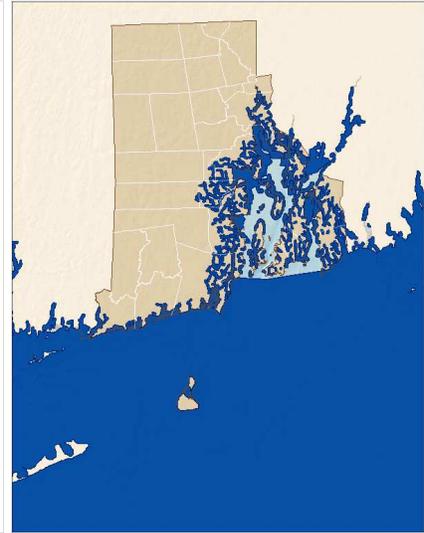


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

***Distribution & Abundance***

Western Atlantic: Nova Scotia, Canada to northern Florida, USA. The current population is believed to be at low levels.

Habitat Community: River, Type: Warm Water, slower flowing stream

***Status***

SRANK: SNR. GRANK: GNR. NALCC: M. NATerns: 1. Climate Change Vulnerability: High=2030 (Food web change/shift)

***Threats and Actions***

**Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Implement management plans to restore spawning population and prevent overharvest. Rank: 3*
  - *Policies and regulations; Manage for sustainable harvest. Rank: 3*

**Threat 2 - Climate change and severe weather; Juvenile nursery areas being impacted by climate change**

- Actions:
- *Site/area management; Restore vegetated buffers, implement stormwater controls, reduce nutrient pollution, reduce impervious surfaces, and other watershed protection actions. Rank: 2*
  - *Education and awareness; Educate landowners about vegetated buffers, stormwater controls, nutrient pollution, impervious surfaces, and other watershed protection problems and active solutions. Rank: 1*

**Refer to the Community: River, Type: Warm Water, slower flowing stream - Habitat Profile for additional threats to this species.**

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## American Brook Lamprey

*Lampetra appendix*

FISH

Freshwater Fish

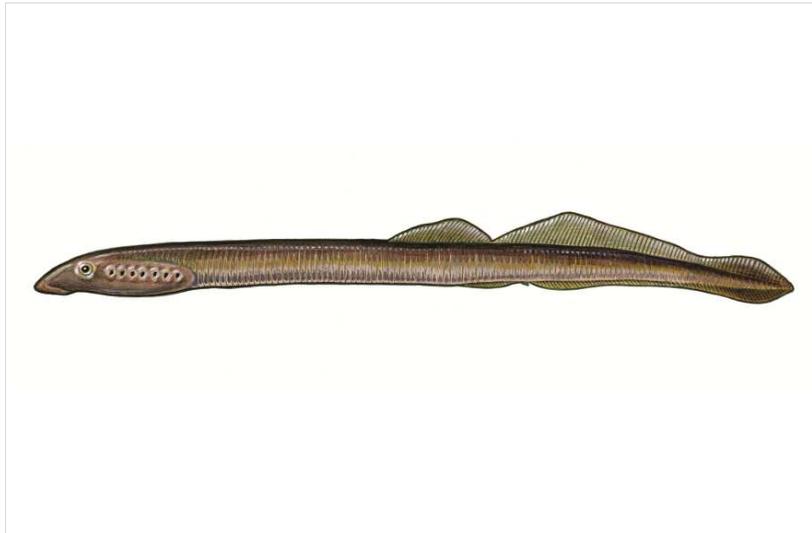


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

The American brook lamprey is a native freshwater species that was collected from six stream locations in the northeastern part of the state. Most were collected from sandy and/or silty substrates. In North America, the American brook lamprey occurs along Atlantic Slope drainages from New Hampshire to Virginia and in the St. Lawrence and Mississippi River basins. Upon hatching, young brook lampreys, known as ammocoetes, drift downstream and burrow into areas with soft substrates where they remain for several years feeding on microscopic plant and animal life. At this stage of life the mouth or oral disk lacks teeth and is surrounded by a fleshy hood, which is lost after it metamorphoses into an adult. Adults are not parasitic and do not feed after reaching maturity, as their intestines have degenerated, and die soon after building a nest and spawning. The Rhode Island Natural Heritage Program has listed the American brook lamprey as State Threatened because of the likelihood of it becoming State Endangered in the future if current trends in habitat loss and other detrimental factors remain unchecked. In Massachusetts and Connecticut it is listed as threatened and endangered, respectively (Libby 2013).

Habitat Community: River, Type: Warm Water

### **Status**

STSTAT: C. SRANK: S1. GRANK: G4. RSGCN: L-VH. CODES: RES. Res/B: 1. GRP: 1. PRIOR: 1. Climate Change Vulnerability: High=2030 (Habitat loss)

### **Threats and Actions**

#### **Threat 1 - Housing and urban areas; Development and land use impacting habitat;**

- Actions:
- *Site/area protection; Protect nursery and preferred habitat areas from impacts. Rank: 3*
  - *Site/area management; Create regulations to ensure protection of nursery or preferred habitat areas. Rank: 3*

#### **Threat 2 - Dams and water management/use; Dams block passage, impacts water quantity in streams as well; impounding water effects their preferred benthic habitat**

- Actions:
- *Habitat and natural process restoration; Implement practices to restore habitat, including dam removal and other activities to increase stream connectivity. Rank: 3*

#### **Threat 3 - Household sewage and urban waste water; Water quality impacts to habitats**

- Actions:
- *Awareness and communications; Create public awareness about habitat importance. Rank: 2*

**Refer to the Community: River, Type: Warm Water - Habitat Profile for additional threats to this species.**

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## Redbreast Sunfish

*Lepomis auritus*

**FISH**

Freshwater Fish

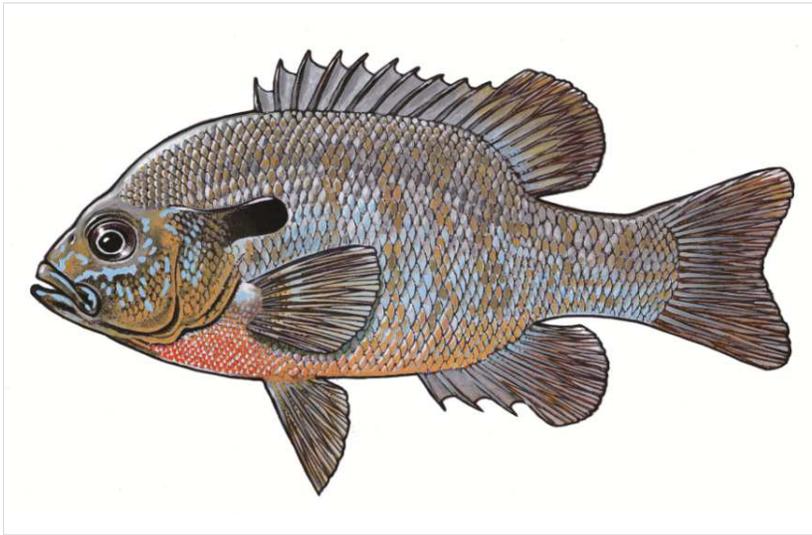
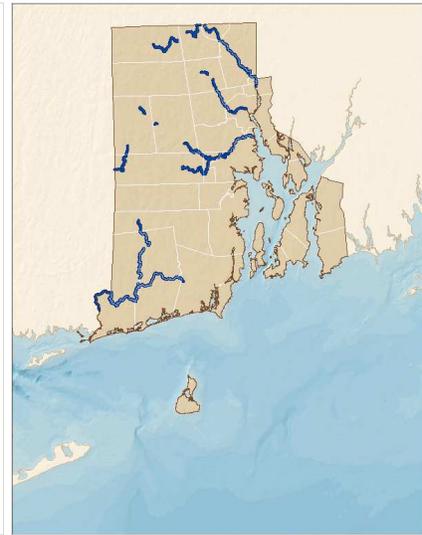


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

According to Libby (2013), the redbreast sunfish is a native species whose distribution was limited to the western portion of the state. It was collected primarily from the rocky and gravelly areas of both streams and ponds. It is native to Atlantic Slope drainages from New Brunswick to Florida. The diet of the redbreast sunfish consists of a variety of aquatic invertebrates and small fish (Libby, 2013).

Habitat Community: River, Type: Warm Water

### ***Status***

IUCN Rank: LC. SRANK: S3. GRANK: G5. RSGCN: H-L. CODES: RES. Res/B: 1. ACCID: 0. AN/CA: 0. EXOT: 0. EXT: 0. FORM: 0. HYPO: 0. MIG: 0. PELAG: 0. REV: 1. Climate Change Vulnerability: Medium=2050 (Habitat loss)

### ***Threats and Actions***

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#### **Threat 1 - Housing and urban areas; Development and land use impacting habitat;**

*Actions:* • *Site/area protection; Protect areas of preferred habitat. Rank: 3*

#### **Threat 2 - Household sewage and urban waste water; Water quality impacts to habitat**

- Actions:*
- *Awareness and communications; Create public awareness of the species through education programs. Rank: 2*
  - *Site/area management; Create regulations to ensure protection of nursery or preferred habitat areas. Rank: 3*
  - *Habitat and natural process restoration; Remove dams or create passage to promote connectivity. Rank: 3*

***Refer to the Community: River, Type: Warm Water - Habitat Profile for additional threats to this species.***

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## Common Shiner

*Luxilus cornutus*

FISH

Freshwater Fish

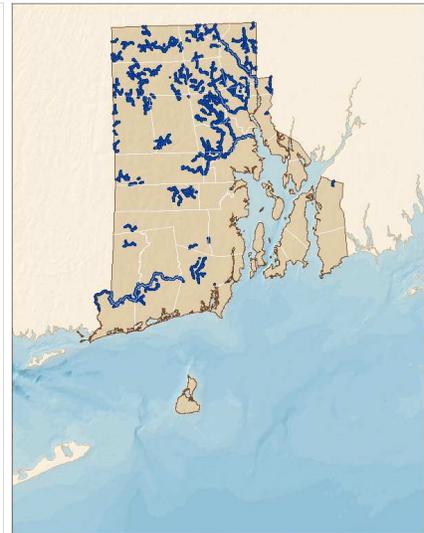
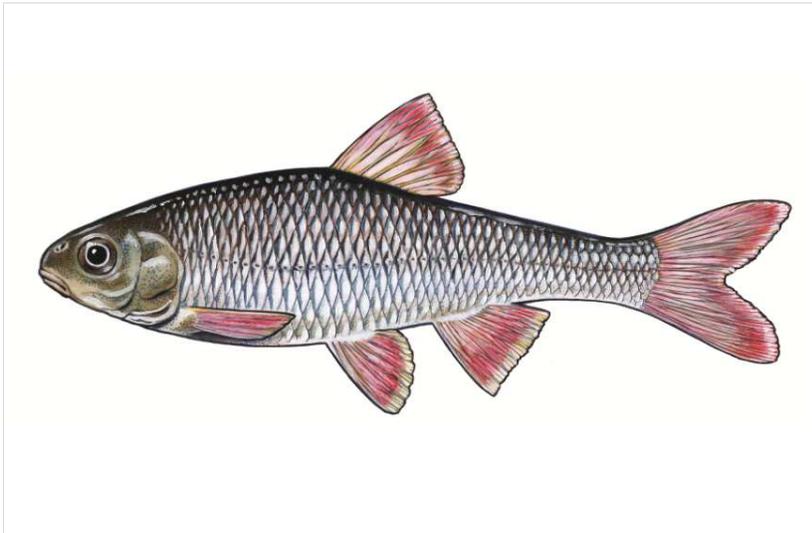


Photo: Roberta Furgalack

~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

The common shiner is a native, freshwater species that was found in several watersheds located in the northern and western areas of the state. It was collected exclusively in streams, its preferred habitat. This species occurs along Atlantic Coast drainages from Nova Scotia to Virginia and west to Wyoming and Saskatchewan. The diet of the common shiner includes a variety of organisms and some plant material, but consists mainly of terrestrial and aquatic invertebrates such as worms and small fishes. It is a popular bait fish in some areas (Libby, 2013).

Habitat Community: Lake, Type: Shallow

### ***Status***

SRANK: S5. GRANK: G5. CODES: RES. Res/B: 1. GRP: 11. PRIOR: 1. Climate Change Vulnerability: Medium=2050 (Habitat loss)

### ***Threats and Actions***

#### **Threat 1 - Housing and urban areas; Watershed development**

Actions: • *Site/area protection; Protect areas of preferred habitat. Rank: 2*

#### **Threat 2 - Invasive non-native/alien species; Predation and displacement by invasive species**

- Actions: • *Invasive/problematic species control; Control importation of non-native species. Rank: 2*
- *Awareness and communications; Create public awareness of the species through education programs. Rank: 3*

***Refer to the Community: Lake, Type: Shallow - Habitat Profile for additional threats to this species.***

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## Inland Silverside

*Menidia beryllina*

FISH

Freshwater Fish

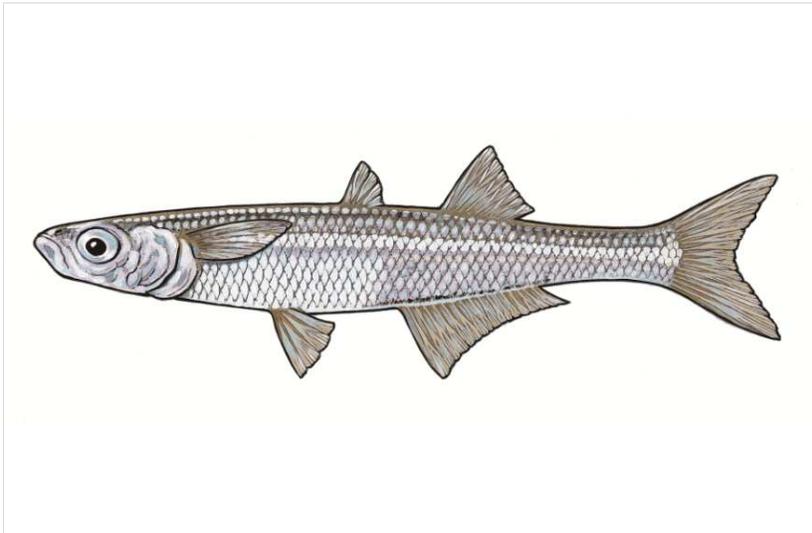
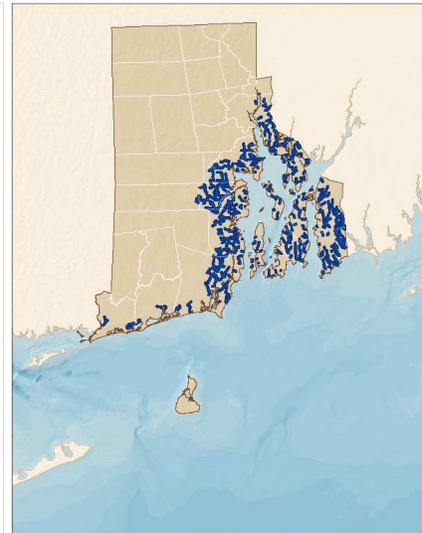


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

The inland silverside occurs along the Atlantic Coast from Massachusetts to Mexico. They are frequently found swimming in schools in bays, salt marshes, and freshwater areas. The diet of the inland silverside is similar to the Atlantic silverside and includes small fish, worms, etc. It is also an important prey item for larger fish as well as a common bait fish (Libby, 2013).

Habitat Community: River, Type: Warm Water, slower flowing stream

### **Status**

SRANK: SNR. GRANK: G5. Climate Change Vulnerability: Medium=2050 (Habitat loss)

### **Threats and Actions**

#### **Threat 1 - Housing and urban areas; Development and land use impacting habitat;**

- Actions:
- *Site/area protection; Protect areas of preferred habitat. Rank: 2*
  - *Site/area management; Create management plans to restore and protect spawning population. Rank: 2*
  - *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 2*

#### **Threat 2 - Household sewage and urban waste water; Water quality impacts to habitat**

- Actions:
- *Awareness and communications; Create public awareness of the species through education programs. Rank: 1*

#### **Threat 3 - Lack of information**

- Actions:
- *Data collection and analysis; Need more research to identify habitat and population issues. Rank: 2*

**Refer to the Community: River, Type: Warm Water, slower flowing stream - Habitat Profile for additional threats to this species.**

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## White Perch

*Morone americana*

FISH

Freshwater Fish

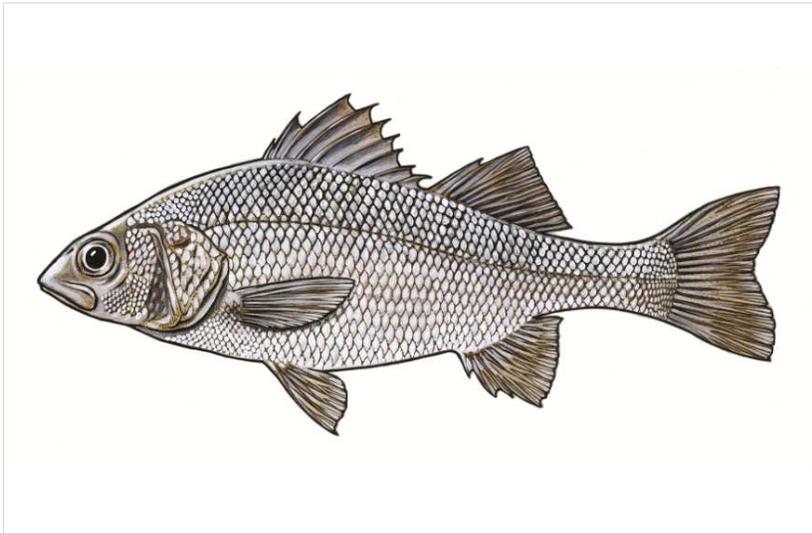
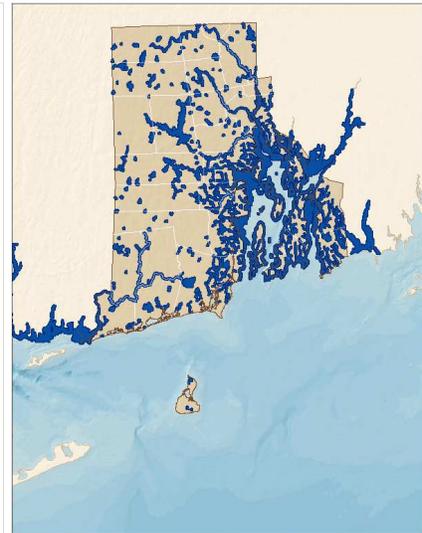


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

The white perch is a native species that was fairly well-distributed throughout the state, occurring primarily in ponds. This brackish water species can tolerate a wide range of salinities. Landlocked populations were also established throughout the state in early stocking programs. White perch are found along the Atlantic Coast of North America from Nova Scotia to South Carolina. White perch, considered by some to be anadromous, feed on a variety of organisms that include aquatic insects and small fish (Libby, 2013).

Habitat Community: River, Type: Warm Water, slower flowing stream

### **Status**

SRANK: S5. GRANK: G5. Climate Change Vulnerability: Medium=2050 (Habitat loss)

### **Threats and Actions**

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Site/area protection; Protect areas of preferred habitat. Rank: 2*
  - *Site/area management; Create management plans to restore spawning population and prevent overharvest. Rank: 2*
  - *Habitat and natural process restoration. Rank: 2*
  - *Awareness and communications. Rank: 1*

**Refer to the Community: River, Type: Warm Water, slower flowing stream - Habitat Profile for additional threats to this species.**

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## Bridle Shiner

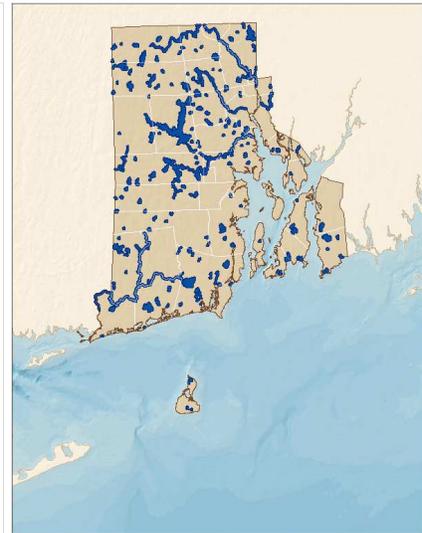
*Notropis bifrenatus*

**FISH**

Freshwater Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

The bridle shiner is a small, native, freshwater species that was collected primarily in the vegetated areas of streams and ponds in the Blackstone, Pawcatuck, Pawtuxet, and coastal Atlantic drainages. Rarely were more than three individuals collected at one time. Bridle shiners are found in Lake Ontario and St. Lawrence drainages and from southern Maine south to Virginia and the Carolinas. This little shiner feeds on small aquatic invertebrates, especially insect larvae, copepods, and cladocerans. Data collected in other states suggest that bridle shiners are declining in the Northeast (Libby, 2013).

Habitat Community: River, Type: Warm Water

### ***Status***

IUCN Rank: NT. SRANK: S5. GRANK: G3. RSGCN: H-VH. CODES: RES. Res/B: 1. GRP: 13. PRIOR: 1. Climate Change Vulnerability: Medium=2050 (Habitat loss)

### ***Threats and Actions***

#### **Threat 1 - Housing and urban areas; Watershed development**

*Actions:*

- *Site/area protection; Protect areas of preferred habitat. Rank: 3*

#### **Threat 2 - Invasive non-native/alien species; Predation and displacement by invasive species;**

- Actions:*
- *Data collection and analysis; Conduct more intensive survey and acquire better understanding of species occurrence and distribution. Rank: 1*
  - *Education and awareness; Create public awareness of the species through education programs. Rank: 1*

***Refer to the Community: River, Type: Warm Water - Habitat Profile for additional threats to this species.***

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**Species of Greatest Conservation Need**

## Rainbow Smelt

*Osmerus mordax*

**FISH**

Freshwater Fish

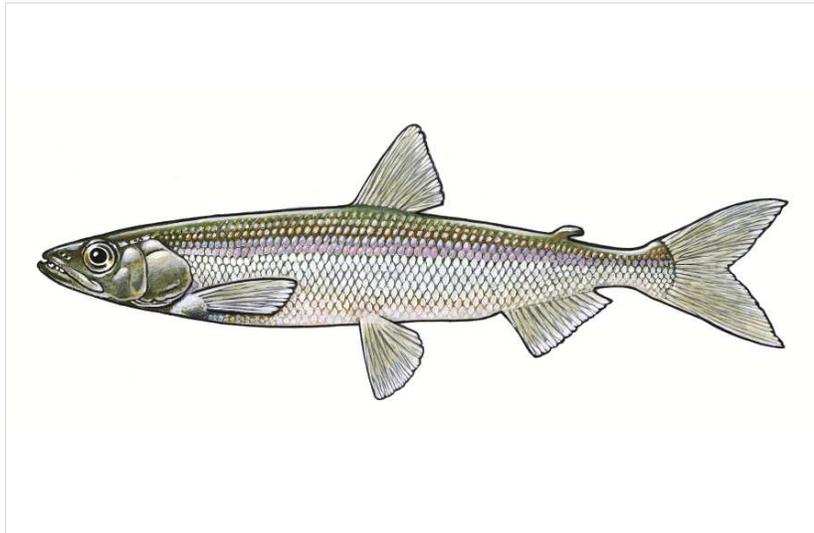
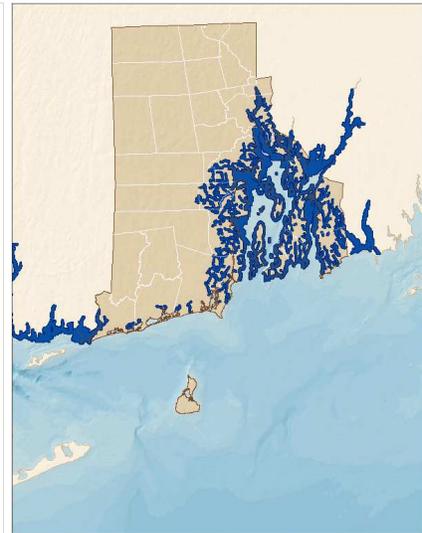


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

This native anadromous species was only collected in the lower Pawcatuck River. It has, however, been collected elsewhere in the coastal waters of Rhode Island. In North America, the rainbow smelt is distributed in the inshore waters of the northern Atlantic, Pacific, and Arctic Ocean drainages. It has been introduced elsewhere, including freshwater environments where landlocked populations have been established. Recreational fishing for this tasty little fish generally occurs during the winter ice fishing season in a number of rivers and streams in the northeast. The rainbow smelt is carnivorous and armed with a mouthful of well-developed teeth, including some on its tongue. It feeds on a variety of small invertebrates and fish (Libby, 2013).

Habitat Community: River, Type: Warm Water, slower flowing stream

### **Status**

SRANK: S1. GRANK: G5. STATE: X. NALCC: AN. NAWCA: 1. USSCP: 1. Climate Change Vulnerability: High=2030 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Household sewage and urban waste water; Water quality impacts to habitat;**

- Actions:
- Resource and habitat protection; Remove dams, create passage in areas where dams can't be removed, prevent new obstructions from being created. Rank: 3
  - Habitat and natural process restoration; Introduce broodstock. Rank: 2
  - Species management; Continue to enforce regulations. Rank: 2

#### **Threat 2 - Temperature extremes; Temperature extremes**

- Actions:
- Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 2

#### **Threat 3 - Biological resource use; Demographic changes from incidental take (human)**

- Actions:
- Technical assistance; Coordinate with other internal agencies to manage most efficiently. Rank: 2
  - Education and awareness; Develop and provide educational program/material to reduce incidental mortality and take from humans. Rank: 2

**Refer to the Community: River, Type: Warm Water, slower flowing stream - Habitat Profile for additional threats to this species.**

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**Species of Greatest Conservation Need**

## Blacknose Dace

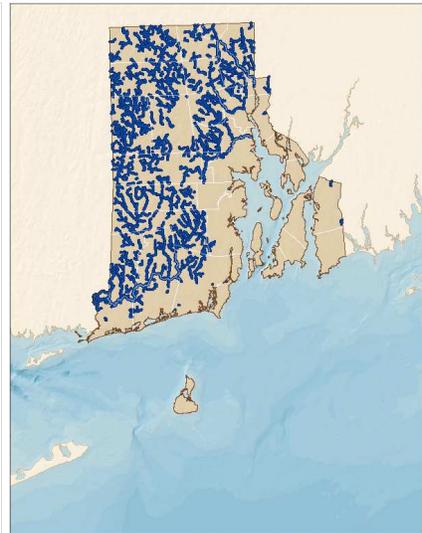
*Rhinichthys atratulus*

FISH

Freshwater Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

The blacknose dace is a native, freshwater species whose distribution was limited to a few widely scattered streams, its preferred habitat. The blacknose dace occurs in southern Canada from Nova Scotia west to Manitoba southward to the Great Lakes and the Mississippi River Basin to Georgia, Alabama, and South Carolina. This species feeds on a variety of organisms, particularly aquatic insect larvae (Libby, 2013).

Habitat Community: River, Type: Warm Water

### **Status**

SRANK: S4. GRANK: G5. NALCC: X. CODES: RES. Res/B: 1. GRP: 15. PRIOR: 1. Climate Change Vulnerability: Medium=2050 (Habitat loss)

### **Threats and Actions**

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**Threat 1 - Housing and urban areas; Development and land use impacting habitat;**

Actions: • *Site/area protection; Protect areas of preferred habitat. Rank: 3*

**Threat 2 - Dams and water management/use; Dams inhibiting connectivity**

Actions: • *Site/area management; Create regulations to prevent habitat loss. Rank: 2*  
• *Habitat and natural process restoration; Remove dams or create passage to promote connectivity. Rank: 2*

**Threat 3 - Household sewage and urban waste water; Water quality impacts to habitat**

Actions: • *Awareness and communications; Create public awareness of the species through education programs. Rank: 2*

**Refer to the Community: River, Type: Warm Water - Habitat Profile for additional threats to this species.**

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**Species of Greatest Conservation Need**

## Atlantic Salmon

*Salmo salar*

**FISH**

Freshwater Fish



Photo: Roberta Furgalack

~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

This native anadromous species was primarily extirpated from Rhode Island by the construction of dams. Dams created barriers to salmon that were returning to natal streams to spawn. In an effort to reestablish a self-sustaining population of Atlantic salmon, salmon fry and smolts are now routinely stocked in the headwaters of the Pawcatuck River drainage, where they grow for one to three years before migrating downstream to the sea. Adults returning to the Pawcatuck River to spawn are 2 to 3 feet (61 – 91 cm) in length and have spent one to three years at sea. Returning adults are trapped at the Potter Hill fishway and are then taken to a hatchery, where they are held until the fall for spawning. Historical accounts show that Atlantic salmon were also found in the Blackstone and Pawtuxet Rivers. Atlantic salmon are found in the western Atlantic Ocean from the Connecticut River north through eastern Canada, to southern Greenland and in the eastern Atlantic from Portugal to the Arctic Circle. Young salmon feed on a variety of aquatic and terrestrial invertebrates when in freshwater and at sea they feed on a variety of fish and crustaceans. Adults do not normally feed during their spawning runs, although they are apt to strike an angler's fly or lure (Libby, 2013).

Habitat Community: River, Type: Cold Water

### ***Status***

IUCN Rank: LC. FEDSTAT: FE. FED: FWS. SRANK: S1. GRANK: G5. STATE: X (B). RSGCN: L-VH. NALCC: AN. NAWCA: 1. USSCP: 1. Climate Change Vulnerability: High=2030 (Habitat loss)

### ***Threats and Actions***

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**Threat 1 - Dams and water management/use; Dams block passage, impacts water quantity in streams as well;**

- Actions:*
- *Resource and habitat protection; Remove dams, create passage in areas where dams can't be removed, prevent new obstructions from being created. Rank: 3*
  - *Habitat and natural process restoration; Remove dams to restore natural flow. Rank: 3*
  - *Species management; Brood stock enhancement. Rank: 1*
  - *Species reintroduction; Brood stock enhancement. Rank: 1*

**Threat 2 - Introduced genetic material; Farmed salmon contaminating natural population genetics**

- Actions:*
- *Policies and regulations; Create robust management plans to prevent genetic contamination from aquaculture and protect natural populations from overharvest. Rank: 1*
  - *Compliance and enforcement; Provide enforcement with resources to enforce protective regulations. Rank: 1*

**Threat 3 - Household sewage and urban waste water; Water quality impacts to habitats**

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**Species of Greatest Conservation Need**

- Actions:
- *Site/area management; Restore vegetated buffers, implement stormwater controls, reduce nutrient pollution, reduce impervious surfaces, and other watershed protection actions. Rank: 2*
  - *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 1*

**Threat 4 - Fishing and harvesting aquatic resources; Demographic changes from incidental take (human)**

- Actions:
- *Education and awareness; Develop and provide educational program/materials to reduce incidental mortality and take from humans. Rank: 1*

**Threat 5 - Climate change and severe weather; Climate change impacting habitat**

- Actions:
- *Data collection and analysis; Research temperature impacts on population and monitor population. Rank: 2*

**Refer to the Community: River, Type: Cold Water - Habitat Profile for additional threats to this species.**

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**Species of Greatest Conservation Need**

## Brook Trout

*Salvelinus fontinalis*

FISH

Freshwater Fish

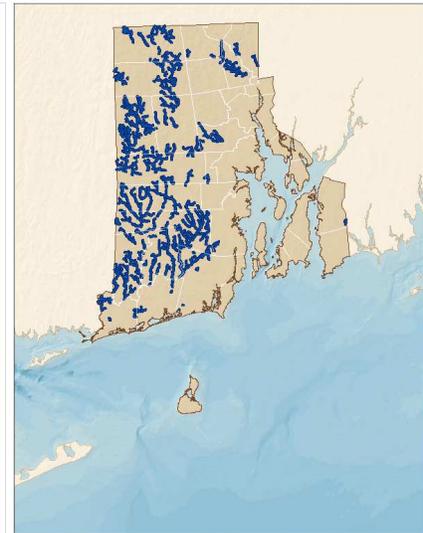


Photo: Roberta Furgalack

~See map disclaimer in profiles introduction

### **Distribution & Abundance**

According to Libby (2013), this colorful, native fish was the sixth most widely distributed species collected, occurring in more than 35 percent of the locations sampled and in nine out of the ten drainages. Wild brook trout were only collected in streams, whereas brook trout that had been stocked by the state for its put-and-take fisheries were also collected in ponds. Brook trout are endemic to much of eastern North America from Hudson Bay drainages to Newfoundland and south through the Great Lakes basin and the Appalachian Mountains to Georgia. They have been introduced elsewhere and are now widely distributed outside of their natural range. Brook trout inhabiting the Great Lakes are often referred to as “coasters” because of their habit of migrating into coastal streams to spawn. Anadromous brook trout, often referred to as “salters,” are found along the east coast of North America from Massachusetts north to Hudson Bay. Not all brook trout inhabiting coastal streams are migratory. Both resident and migratory fish can be found in the same drainage. This carnivorous fish feeds on a variety of invertebrates and fish (Libby, 2013).

Habitat Community: River, Type: Cold Water

### **Status**

SRANK: S5. GRANK: G5. RSGCN: L-VH. NALCC: X. CODES: RES. Res/B: 1. GRP: 23. PRIOR: 1. Climate Change Vulnerability: High=2030 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Housing and urban areas; Development and land use impacting habitat**

Actions: • *Site/area protection; Protect areas of preferred habitat, especially currently unprotected areas.*  
Rank: 3

- *Site/area protection; Investigate the feasibility of identifying and establishing sanctuary areas.*  
Rank: 2

#### **Threat 2 - Dams and water management/use; Dams inhibiting connectivity**

Actions: • *Site/area protection; Protect preferred habitat areas from impacts.* Rank: 3

- *Site/area management; Create regulations to ensure protection of preferred habitat areas.*  
Rank: 3
- *Habitat and natural process restoration; Remove dams and redesign road crossings to create passage and promote connectivity.* Rank: 3

#### **Threat 3 - Household sewage and urban waste water; Water quality impacts to habitats**

Actions: • *Site/area management; Restore vegetated buffers, implement stormwater controls, reduce*

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**Species of Greatest Conservation Need**

*nutrient pollution, reduce impervious surfaces, and other watershed protection actions. Rank: 3*

**Threat 4 - Problematic native species; Predation by native mammals**

*Actions:* • *Awareness and communications; Create public awareness of the species through education programs. Rank: 1*

**Threat 5 - Habitat shifting and alteration; Climate change impacting habitat**

*Actions:* • *Data collection and analysis; Research temperature impacts on population and monitor population. Rank: 2*

**Threat 6 - Transportation and service corridors; Loss of habitat from plant succession**

*Actions:* • *Site/area protection; Identify priority parcels to retain as core forest areas with minimal management. Rank: 3*

***Refer to the Community: River, Type: Cold Water - Habitat Profile for additional threats to this species.***

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**Species of Greatest Conservation Need**

## Butterfish

*Poronotus triacanthus*

FISH

Estuarine Fish

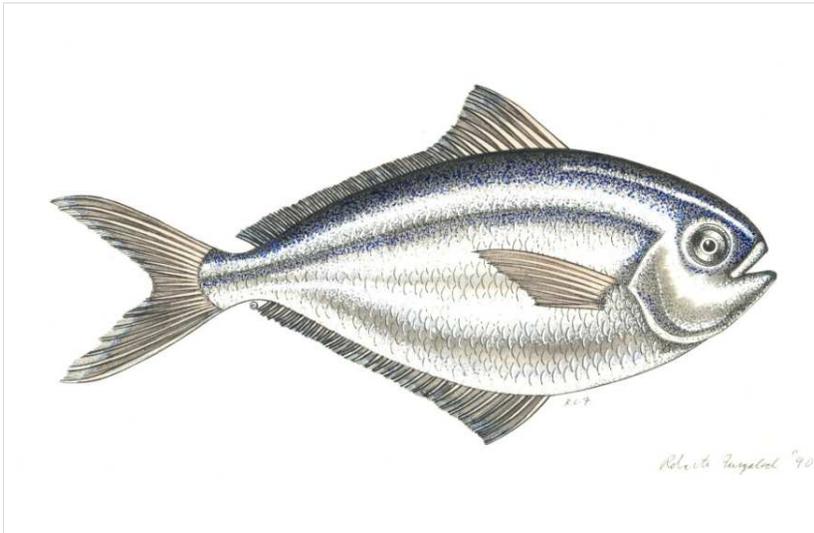
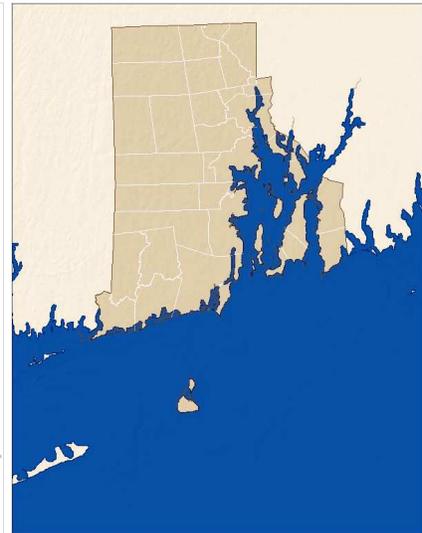


Photo: Robert Golder



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### **Distribution & Abundance**

Western Atlantic: eastern Newfoundland and Gulf of St. Lawrence, Canada to Palm Beach, eastern Florida, USA. Also in the Gulf of Mexico. Overall population is believed to be healthy.

Habitat Community: Pelagic, Type: Estuarine Pelagic

### **Status**

SRANK: SNR. GRANK: GNR. RSGCN: H-L. Climate Change Vulnerability: High=2030 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Continue to implement management plans to restore spawning population and prevent overharvest. Rank: 2*
  - *Species recovery; Promote management plans to maintain the rebuilding of the stock. Rank: 2*
  - *Training; Create programs to inform best fishing practices to protect the stock and avoid bycatch. Rank: 3*

#### **Threat 2 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Policies and regulations; Create regulations to prevent or encourage lower bycatch. Rank: 2*
  - *Private sector standards and codes; Create programs that allow harvest in a sustainable manner. Rank: 2*

**Refer to the Community: Pelagic, Type: Estuarine Pelagic - Habitat Profile for additional threats to this species.**

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**Species of Greatest Conservation Need**

## American Sand Lance

*Ammodytes americanus*

FISH

Marine Fish

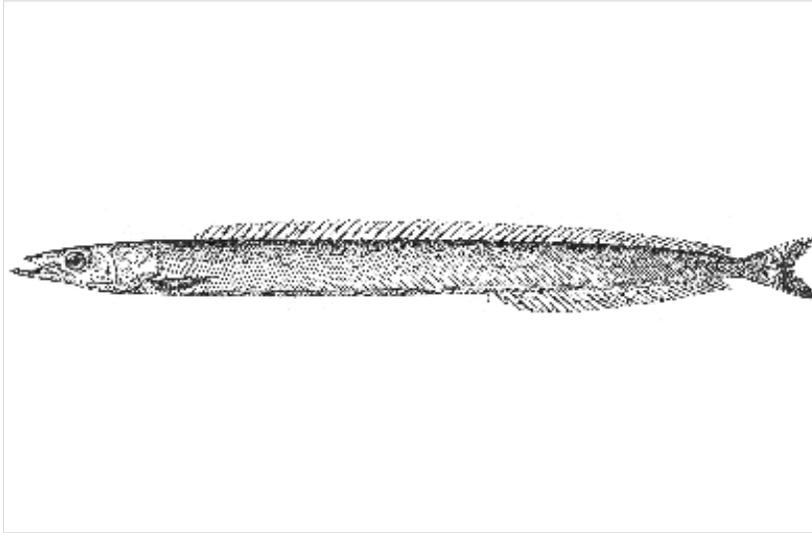
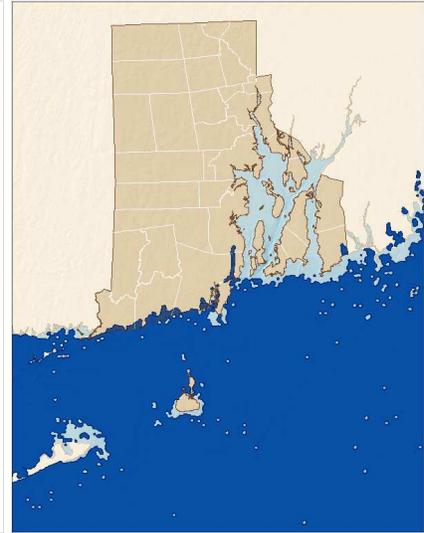


Photo: H. L. Todd; Collette & Klein-MacPhee, 2002, 3rd ed. of "Fishes of the Gulf of Maine"



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Northwest Atlantic: southern Delaware north to Labrador. Overall population abundance for this species is poorly understood. American sand lance is an important prey item for many predators.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### ***Status***

SRANK: SNR. GRANK: G5. RSGCN: H-VH. NALCC: MARINE. NATerns: 1. AJV BCR: 1. Climate Change Vulnerability: Medium=2050 (Food web change/shift)

### ***Threats and Actions***

#### **Threat 1 - Other ecosystem modifications; Dredging or direct impact to habitat**

- Actions:
- *Resource and habitat protection; Protect preferred habitat from impacts. Rank: 2*
  - *Habitat and natural process restoration; Prevent dredging or other direct impacts to preferred habitat. Rank: 2*

#### **Threat 2 - Household sewage and urban waste water; Water quality impacts to habitats**

- Actions:
- *Data collection and analysis; Create grants to promote research to study population impacts beyond human impacts. Rank: 2*

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**

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**Species of Greatest Conservation Need**

## Bay Anchovy

*Anchoa mitchilli*

FISH

Marine Fish

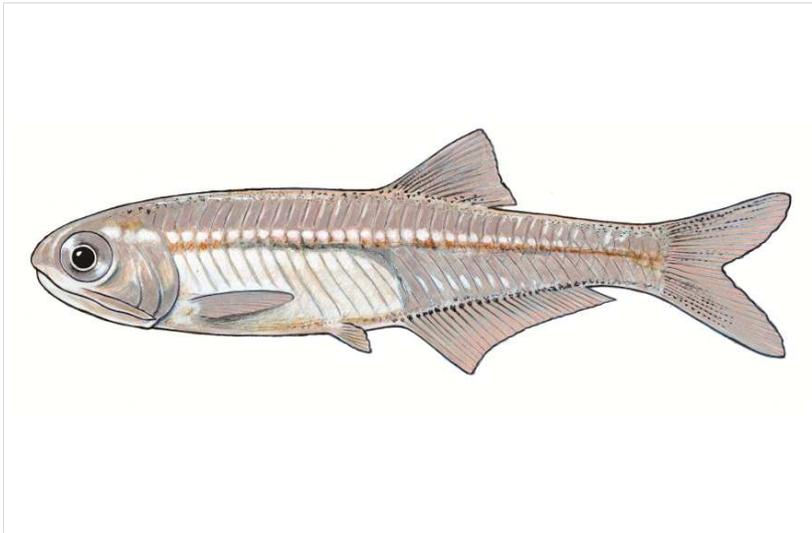
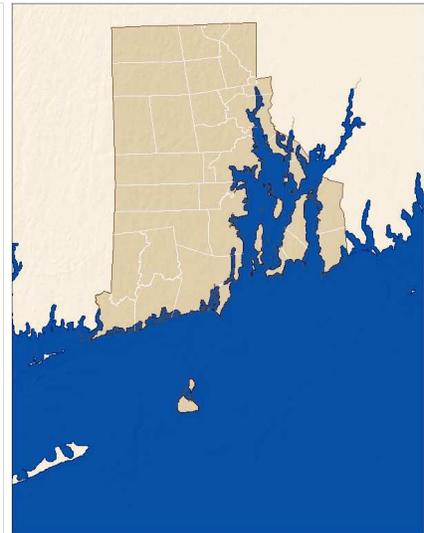


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Western Atlantic: Casco Bay, Maine south to Florida Keys and westward around the Gulf of Mexico south to Yucatán; not in the West Indies. Overall population abundance for this species is poorly understood.

Habitat Community: Pelagic, Type: Marine Pelagic

### ***Status***

SRANK: SNR. GRANK: G5. Climate Change Vulnerability: Medium=2050 (Temperature change)

### ***Threats and Actions***

#### **Threat 1 - Household sewage and urban waste water; Water quality impacts to habitats**

*Actions:* • *Resource and habitat protection; Research is needed to identify the preferred habitat areas, so that they may be protected. Rank: 2*

#### **Threat 2 - Temperature extremes; Climate change impacting spatial areas bay anchovy are associated with**

*Actions:* • *Data collection and analysis; Create grants to promote research to study the population and human induced impacts to that population. Rank: 2*

***Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.***

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**Species of Greatest Conservation Need**

## Atlantic Menhaden

*Brevoortia tyrannus*

**FISH**

Marine Fish

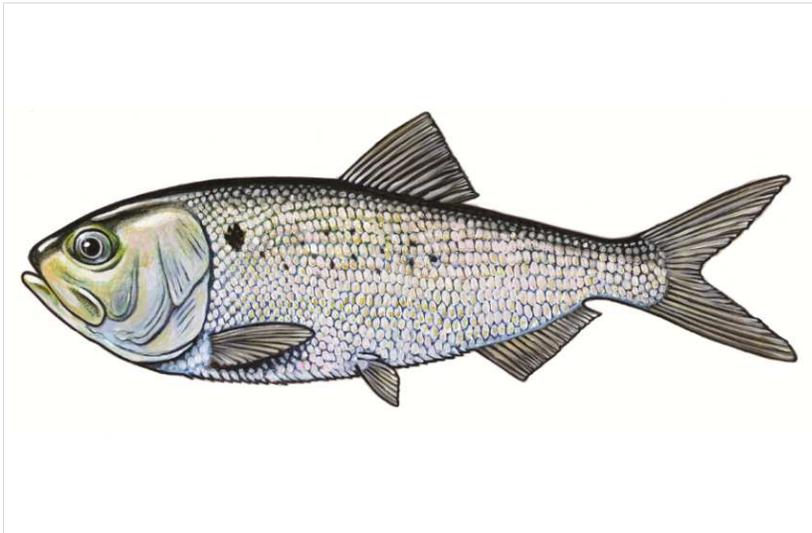
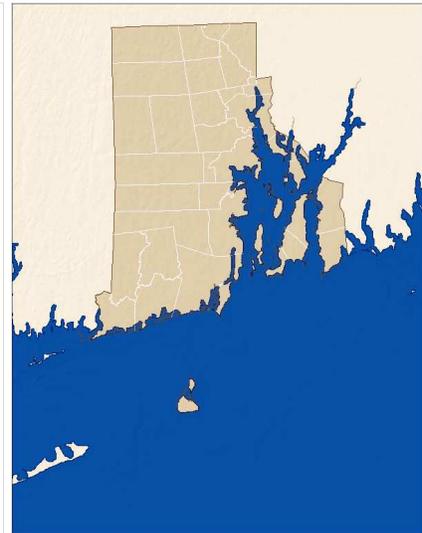


Photo: Robert Golder



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Western Atlantic: Nova Scotia, Canada southward to Indian River, Florida, USA. Population abundance is low relative to historic levels, but is undergoing a benchmark stock assessment in 2014.

Habitat Community: Pelagic, Type: Marine Pelagic

### ***Status***

SRANK: SNR. GRANK: G5. NALCC: AN. NATerns: 1. Climate Change Vulnerability: High=2030 (Temperature change)

### ***Threats and Actions***

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:*
- *Resource and habitat protection; Protect areas that menhaden frequent and aggregate so they are not as susceptible to overharvest. Rank: 3*
  - *Species management; Implement regulations that can support ecological needs as well as human needs. Rank: 3*
  - *Policies and regulations; Develop regulations that are enforceable and effective for harvest control and management of this high volume fishery. Rank: 2*
  - *Compliance and enforcement. Rank: 2*

#### **Threat 2 - Problematic native species; Predation by multiple species (cormorants, striped bass, etc.)**

- Actions:*
- *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 3*

**Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Sand Tiger

*Carcharias taurus*

FISH

Marine Fish



Photo: Marc Dando



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Circumtropical: Throughout the Eastern Pacific. Indo-West Pacific: Red Sea and off South Africa to Japan, Korea and Australia. Present in Arafura Sea. Western Atlantic: Gulf of Maine to Argentina. Eastern Atlantic: Mediterranean to Cameroon. Northwest Atlantic: Canada. It has a strongly K-selected life history and produces only two large pups per litter. As a result, annual rates of population increase are very low, greatly reducing its ability to sustain fishing pressure. Populations in several locations have been severely depleted by commercial fishing, spearfishing and protective beach meshing, requiring the introduction of specific protective management measures.

Habitat Community: Pelagic, Type: Marine Pelagic

### ***Status***

SRANK: SNR. GRANK: G3G4. Climate Change Vulnerability: Medium=2050 (Food web change/shift)

### ***Threats and Actions***

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#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:*
- *Species management; Create management plans to restore spawning population and prevent overharvest. Rank: 3*
  - *Policies and regulations; Create regulations to protect spawning populations. Rank: 2*
  - *Data collection and analysis; Research needed to identify spawning areas. Rank: 2*

***Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.***

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**Species of Greatest Conservation Need**

## Black Sea Bass

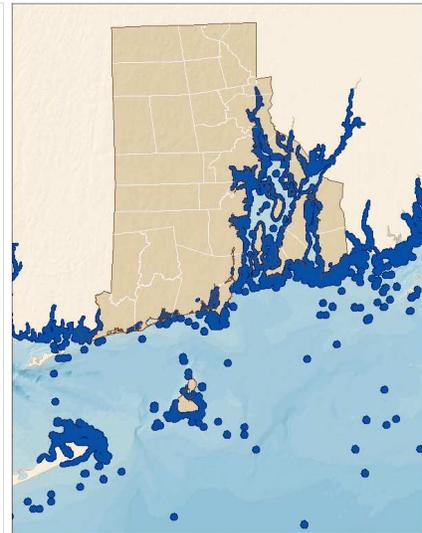
*Centropristis striata*

FISH

Marine Fish



Photo: Robert Golder



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

Western Atlantic: Canada to Maine to northeastern Florida in USA and eastern Gulf of Mexico; reaches extreme southern Florida during cold winters. Population is believed to be in a healthy condition, though current management of the stock is conservative.

Habitat Community: Marine Rocky Reef, Type: Hard, Rocky Bottom

### **Status**

SRANK: SNR. GRANK: GNR. Climate Change Vulnerability: High=2030 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Resource and habitat protection; Protect of preferred habitat, including complex bottom habitat. Rank: 2*
  - *Species management; Continue to implement management plans to restore spawning population and prevent overharvest. Rank: 3*
  - *Habitat and natural process restoration; Enhance areas of preferred habitat, including complex bottom habitat. Rank: 2*

#### **Threat 2 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Policies and regulations; Create regulations to encourage sustainable harvest. Rank: 2*
  - *Compliance and enforcement; Provide enforcement and resources necessary to enforce protective regulations. Rank: 2*
  - *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 3*

**Refer to the Community: Marine Rocky Reef, Type: Hard, Rocky Bottom - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Atlantic Herring

*Clupea harengus*

FISH

Marine Fish

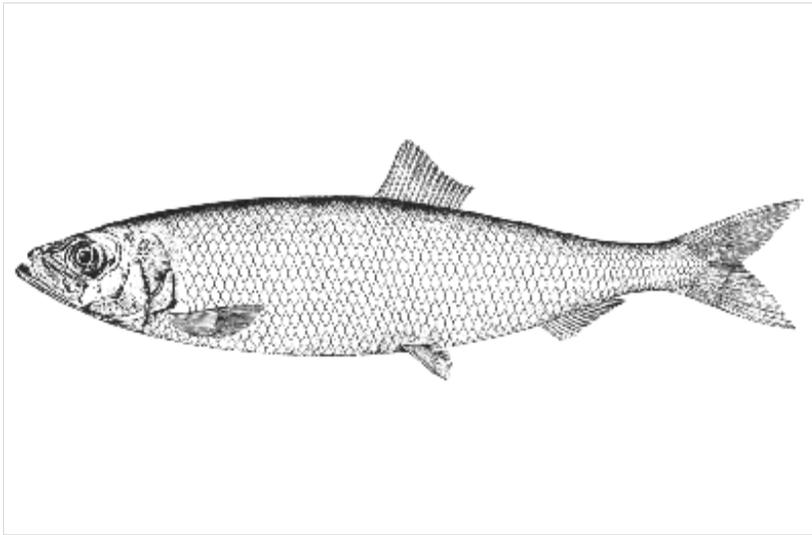
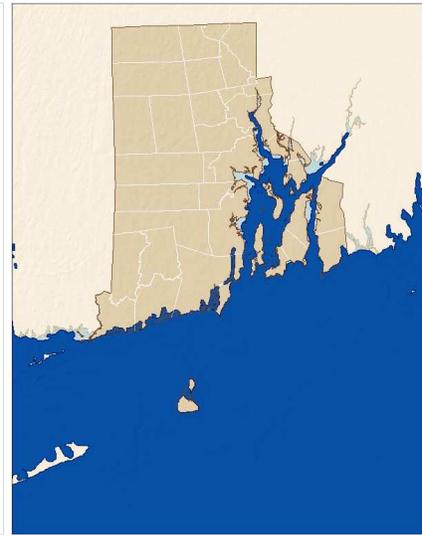


Photo: H. L. Todd; Collette & Klein-MacPhee, 2002, 3rd ed. of "Fishes of the Gulf of Maine"



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

North Atlantic: in the west, it ranges from southwestern Greenland and Labrador southward to South Carolina, USA. In the east, it ranges from Iceland and southern Greenland southward to the northern Bay of Biscay and eastward to Spitsbergen and Novaya Zemlya in Russia, including the Baltic Sea. Since a severe population crash in the stock in the 1970s, limits were imposed on the harvest levels of this species in an attempt to rebuild the stock. Since then the biomass has shown an increase. Current estimates suggest that only 10% of the stock is being exploited and there are no reports of over-fishing occurring. Continued monitoring of the harvest levels and stock biomass is needed to ensure limits can be revised should there be changes to the levels of recruitment.

Habitat Community: Pelagic, Type: Marine Pelagic

### **Status**

IUCN Rank: LC. SRANK: SNR. GRANK: GNR. RSGCN: H-L. Climate Change Vulnerability: High=2030 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Continue to implement plans that promote protection of spawning stock. Rank: 3*
  - *Species recovery; Create management plans that promote species rebuilding plans. Rank: 1*
  - *Policies and regulations; Create management systems useful for high volume fisheries. Rank: 2*
  - *Compliance and enforcement; Enforce management system regulations that are useful for high volume fisheries. Rank: 2*

#### **Threat 2 - Problematic native species; Predation by multiple species (cormorants, striped bass, etc.)**

- Actions:
- *Resource and habitat protection; Continue to protect areas of known spawning aggregations. Rank: 3*
  - *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 3*

#### **Threat 3 - Temperature extremes; Climate change impacting spatial areas with which herring are associated**

- Actions:
- *Research, survey, inventory, monitor populations; Monitor and assess if abundance is shifting spatially. Rank: 2*

**Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.**

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**Species of Greatest Conservation Need**

## Sheepshead Minnow

*Cyprinodon variegatus*

**FISH**  
Marine Fish

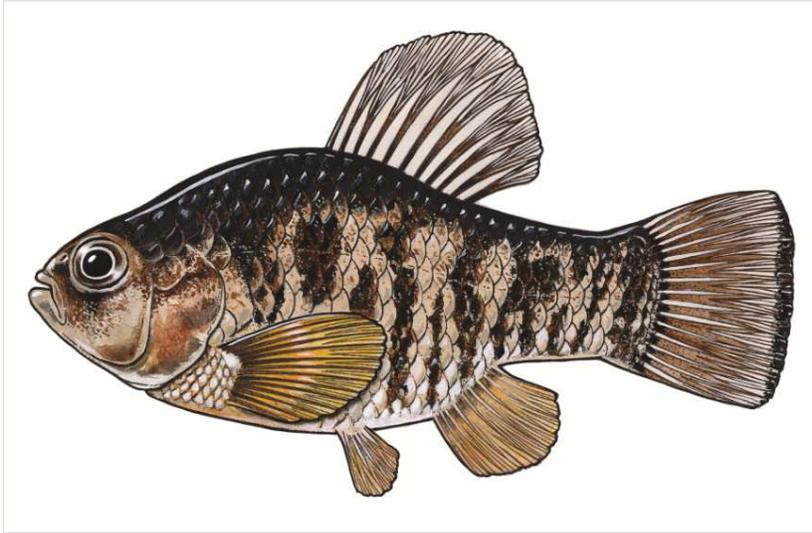
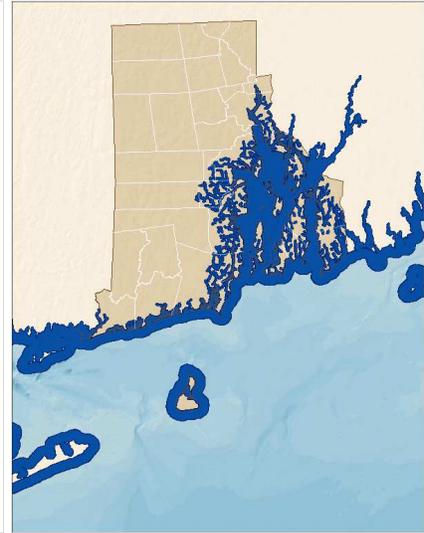


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

North and South America: Massachusetts, USA to northeastern Mexico; also West Indies; northern coast of South America. Bahamas, Antilles, Gulf of Mexico, Yucatan and Venezuela. Overall population abundance is poorly understood, but believed to be abundant.

Habitat Community: Marine Soft Sediment, Type: Soft Bottom

### ***Status***

SRANK: SNR. GRANK: G5. Climate Change Vulnerability: Low=2100 (Habitat loss)

### ***Threats and Actions***

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**Threat 1 - Household sewage and urban waste water; Water quality impacts to habitat;**

- Actions:*
- *Site/area protection; Protect areas of preferred habitat. Rank: 3*
  - *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 2*

***Refer to the Community: Marine Soft Sediment, Type: Soft Bottom - Habitat Profile for additional threats to this species.***

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**Species of Greatest Conservation Need**

## Little Tunny

*Euthynnus alletteratus*

FISH

Marine Fish

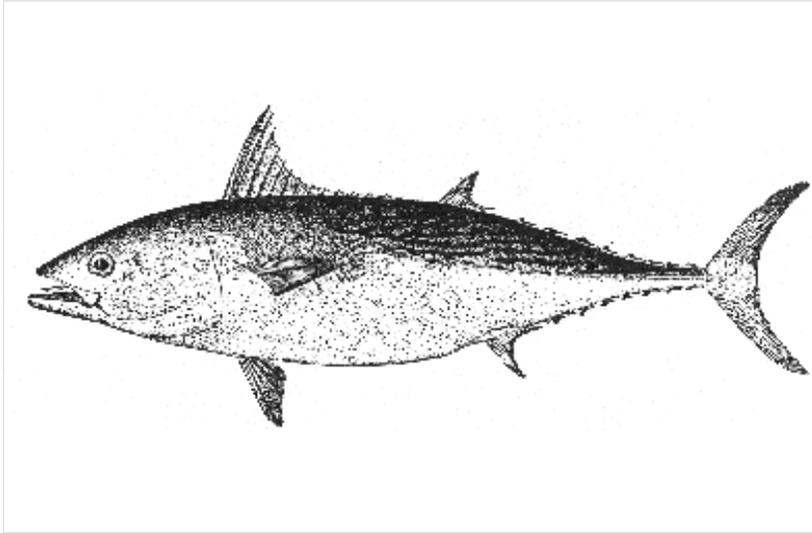
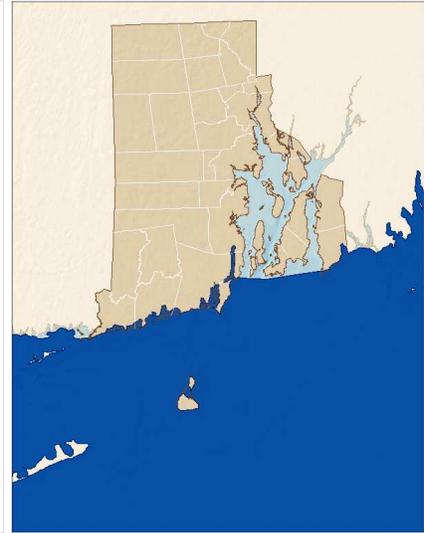


Photo: H. L. Todd; Collette & Klein-MacPhee, 2002, 3rd ed. of "Fishes of the Gulf of Maine"



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

Atlantic Ocean: in tropical and subtropical waters, including the Mediterranean, Black Sea, Caribbean Sea and Gulf of Mexico. Highly migratory species moving through the northwest Atlantic in mid to late summer through early fall. Based on available data, this species is listed as Least Concern. However, close monitoring of catches should continue.

Habitat Community: Pelagic, Type: Marine Pelagic

### **Status**

SRANK: SNR. GRANK: GNR. Climate Change Vulnerability: Medium=2050 (Food web change/shift)

### **Threats and Actions**

---

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Create management plans to restore spawning population and prevent overharvest. Rank: 1*
  - *Nonmonetary value; Promote education to inform public of ecosystem benefits. Rank: 2*

**Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

**Mummichog**

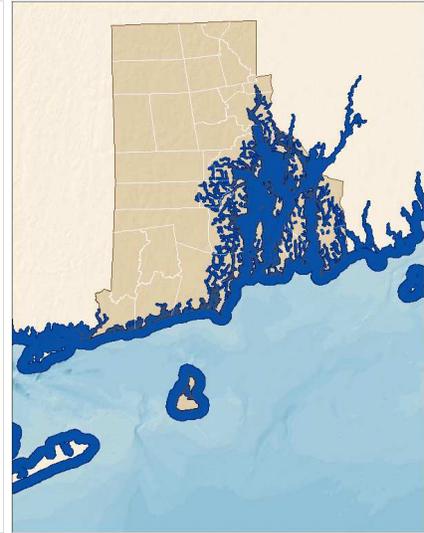
*Fundulus heteroclitus*

**FISH**

Marine Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

***Distribution & Abundance***

Western Atlantic: Canada to Sandy Hook, New Jersey to northeastern Florida, and in lower Chesapeake and Delaware bays. Introduced to southern Portugal and southern Spain. Overall population abundance is poorly understood, but believed to be abundant.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

***Status***

SRANK: SNR. GRANK: GNR. RSGCN: H-L. Climate Change Vulnerability: Low=2100 (Temperature change)

***Threats and Actions***

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**Threat 1 - Household sewage and urban waste water; water quality impacts to habitat;**

- Actions:
- *Site/area protection; Protect areas of preferred habitat. Rank: 2*
  - *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 2*

***Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.***

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Spotfin Killifish

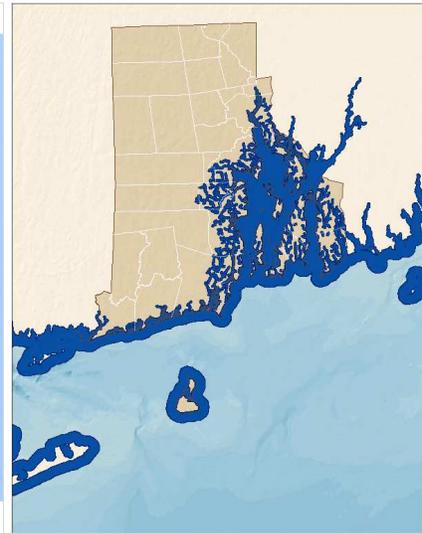
*Fundulus luciae*

FISH

Marine Fish



Photo: Robert Jacobs; CT Inland Fisheries



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

Western Atlantic: Massachusetts to North Carolina in USA. Overall population abundance is poorly understood.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### **Status**

SRANK: SNR. GRANK: G4. RSGCN: H-VH. CODES: AN. Res/B: 1. AN/CA: 1. REV: 1. Climate Change Vulnerability: Low=2100 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Lack of information; More info needed on this species**

- Actions:
- *Site/area protection; Protect areas of preferred habitat. Rank: 2*
  - *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 2*
  - *Data collection and analysis; Research occurrence of this species in RI waters. Rank: 2*

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

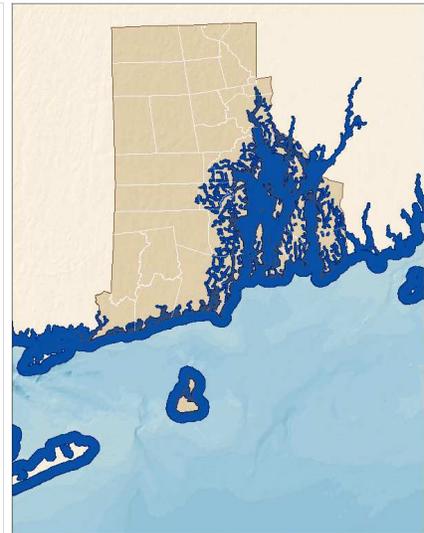
## Striped Killifish

*Fundulus majalis*

**FISH**  
Marine Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Western Atlantic: New Hampshire to northeastern Florida in USA; also in northern Gulf of Mexico. Overall population abundance poorly understood but believed to be abundant.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### ***Status***

SRANK: SNRN. GRANK: G5. RSGCN: H-L. Climate Change Vulnerability: Low=2100 (Habitat loss)

### ***Threats and Actions***

---

#### **Threat 1 - Household sewage and urban waste water; Water quality impacts to habitat**

- Actions:*
- *Site/area protection; Protect areas of preferred habitat. Rank: 2*
  - *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 2*

***Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.***

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Atlantic Cod

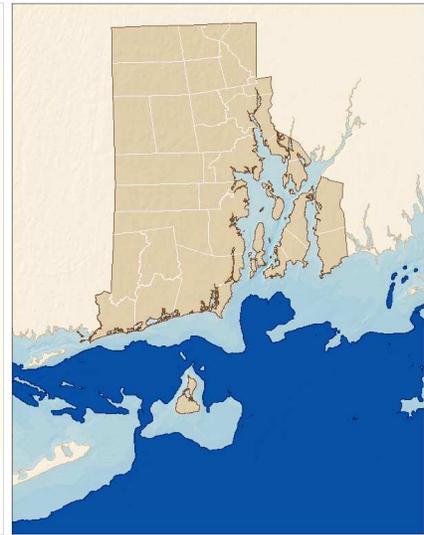
*Gadus morhua*

FISH

Marine Fish



Photo: Robert Golder



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

North Atlantic and Arctic: Ungava Bay in Canada along the North American coast to Cape Hatteras; North Carolina in the western Atlantic. East and west coast of Greenland; around Iceland; from Barents Sea including the region around Bear Island along the European coast to Bay of Biscay. The current population is believed to be at low levels.

Habitat Community: Marine Soft Sediment, Type: Offshore Soft Sediment

### **Status**

SRANK: SNR. GRANK: G5. Climate Change Vulnerability: High=2030 (Habitat loss)

### **Threats and Actions**

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Continue to implement management plans to restore spawning population and prevent overharvest. Rank: 3*
  - *Policies and regulations; Create regulations to protect spawning populations. Rank: 3*

#### **Threat 2 - Temperature extremes; Temperature impacting habitat**

- Actions:
- *Data collection and analysis; Collect data and monitor the population. Rank: 2*
  - *Other; Adopt comprehensive ecosystem based management strategy. Rank: 2*

#### **Threat 3 - Lack of information**

- Actions:
- *Data collection and analysis; Collect data and monitor the population. Rank: 3*

**Refer to the Community: Marine Soft Sediment, Type: Offshore Soft Sediment - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Sticklebacks

*Gasterosteus spp*

FISH

Marine Fish

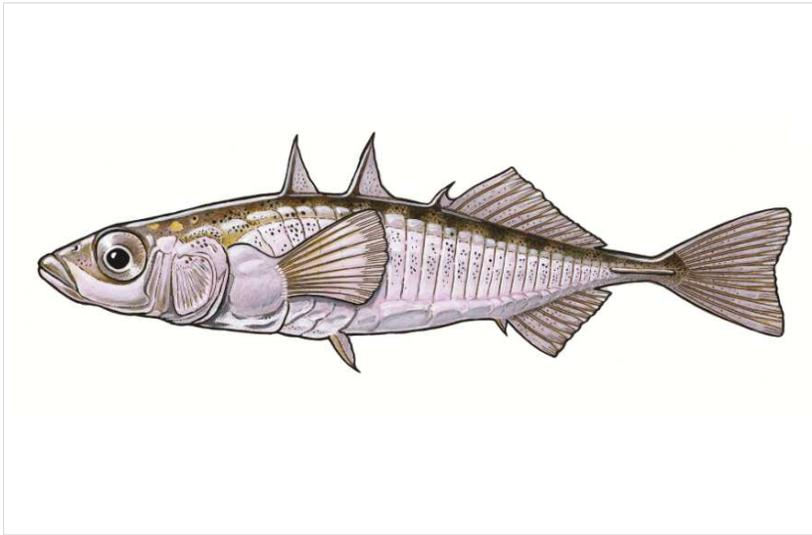
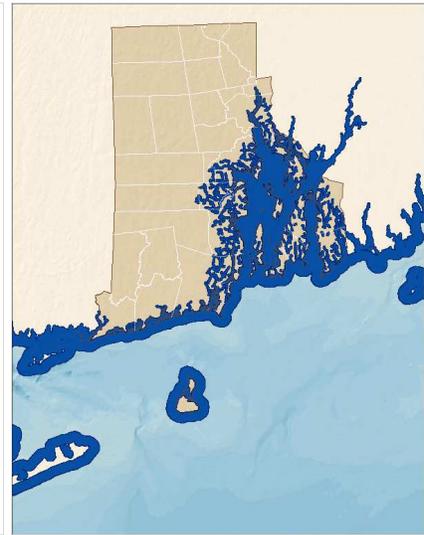


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

Circumarctic and temperate regions: Extending south to the Black Sea, southern Italy, Iberian Peninsula, North Africa; in Eastern Asia north of Japan (35°N), in North America north of 30-32°N; Greenland. Overall population abundance poorly understood.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### **Status**

Climate Change Vulnerability: High=2030 (Habitat loss)

### **Threats and Actions**

#### **Threat 1 - Housing and urban areas; Development and land use impacting habitat;**

- Actions:
- *Site/area protection; Protect areas of preferred habitat. Rank: 2*
  - *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 2*

#### **Threat 2 - Household sewage and urban waste water; Water quality impacts to habitat**

- Actions:
- *Site/area management; Restore vegetated buffers, implement stormwater controls, reduce nutrient pollution, reduce impervious surfaces, and other watershed protection actions. Rank: 2*

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Lined Seahorse

*Hippocampus erectus*

FISH

Marine Fish

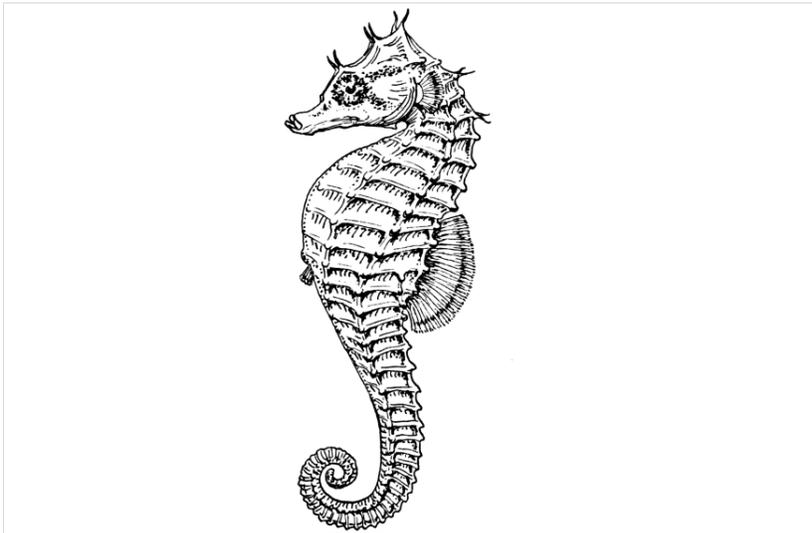
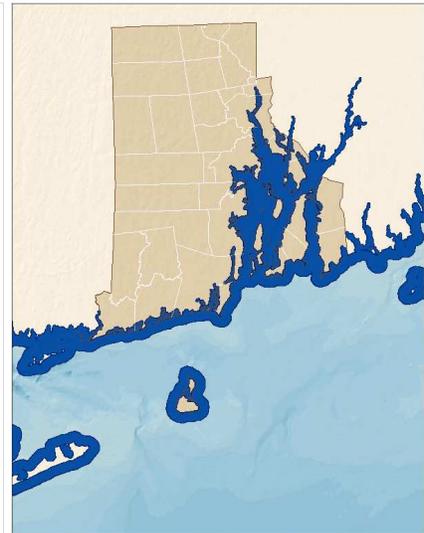


Photo: Pearson Scott Foresman



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### **Distribution & Abundance**

Western Atlantic: Nova Scotia, Canada and northern Gulf of Mexico to Panama and Venezuela. *H. erectus* is listed as Vulnerable based on inferred declines of at least 30% caused by targeted catch, incidental capture, and habitat degradation. While there is little information on changes in numbers of the species, there is indirect evidence to suggest that declines have taken place and are continuing.

Habitat Community: Brackish Tidal Aquatic Vegetation, Type: Brackish Subtidal Aquatic Bed

### **Status**

CITES: II. IUCN Rank: VU. SRANK: SNR. GRANK: GNR. NALCC: M. NATerns: 1. Climate Change Vulnerability: High=2030 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Household sewage and urban waste water; Water quality impacts to habitat;**

- Actions:
- *Resource and habitat protection; Protect areas of preferred habitat. Rank: 2*
  - *Data collection and analysis; Create grants to promote research to study population impacts. Rank: 1*

**Refer to the Community: Brackish Tidal Aquatic Vegetation, Type: Brackish Subtidal Aquatic Bed - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

**Rainwater Killifish**

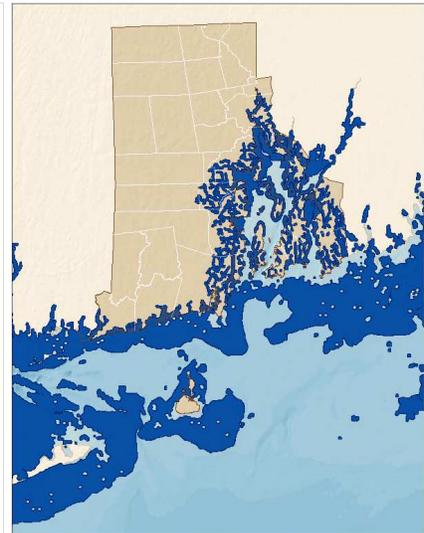
*Lucania parva*

**FISH**

Marine Fish



Photo: Roberta Furgalack



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***Distribution & Abundance***

Western Atlantic: Massachusetts and northern Gulf of Mexico to Florida Keys in USA and northeastern Mexico. Ascends Rio Grande and Pecos River in Texas and New Mexico in USA. Overall population abundance poorly understood.

Habitat Community: Marine Soft Sediment, Type: Soft Bottom

***Status***

SRANK: SNR. GRANK: G5. Climate Change Vulnerability: Low=2100 (Habitat loss)

***Threats and Actions***

**Threat 1 - Household sewage and urban waste water; Water quality impacts to habitat;**

- Actions:*
- *Site/area protection; Protect areas of preferred habitat. Rank: 2*
  - *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 2*

***Refer to the Community: Marine Soft Sediment, Type: Soft Bottom - Habitat Profile for additional threats to this species.***

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Atlantic Silverside

*Menidia menidia*

**FISH**

Marine Fish

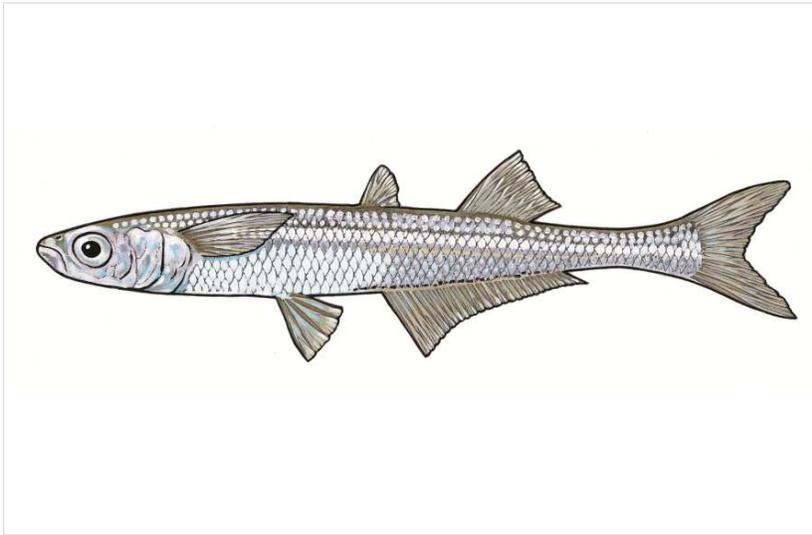
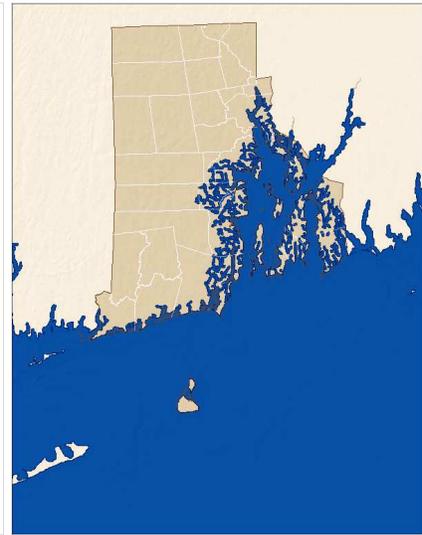


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Western Atlantic: Gulf of St. Lawrence in Canada to northeastern Florida in USA. Overall population abundance poorly understood but believed to be abundant.

Habitat Community: Pelagic, Type: Marine Pelagic

### ***Status***

SRANK: SNR. GRANK: G5. RSGCN: H-L. Climate Change Vulnerability: Low=2100 (Temperature change)

### ***Threats and Actions***

#### **Threat 1 - Household sewage and urban waste water; Water quality impacts to habitats**

- Actions:
- *Resource and habitat protection; Protect areas that silversides frequent and aggregate . Rank:*
  - *Data collection and analysis; Create grants to promote research to study population impacts . Rank: 2*

***Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.***

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Atlantic Tomcod

*Microgadus tomcod*

**FISH**

Marine Fish

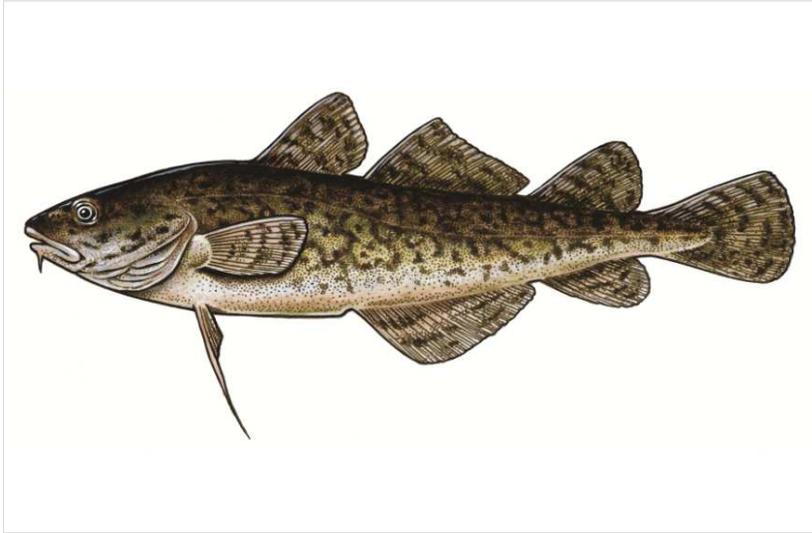
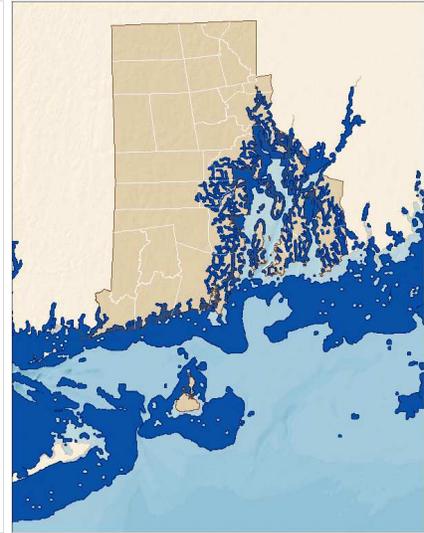


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

Northwest Atlantic: southern Labrador in Canada to Virginia in USA. Overall population abundance poorly understood.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### **Status**

SRANK: SNR. GRANK: G5. RSGCN: H-M. NALCC: AN. USSCP: 1. Climate Change Vulnerability: High=2030 (Habitat loss)

### **Threats and Actions**

#### **Threat 1 - Household sewage and urban waste water; Water quality impacts to habitats**

*Actions:* • Resource and habitat protection; Protect areas of preferred habitat. Rank: 2

#### **Threat 2 - Temperature extremes; Climate change impacting spatial areas with which tomcod are associated**

*Actions:* • Data collection and analysis; Create grants to promote research to study the population and human induced impacts to that population. Rank: 2

• Planning; Include climate change implications in plans that affect tomcod. Rank: 2

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**

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**Species of Greatest Conservation Need**

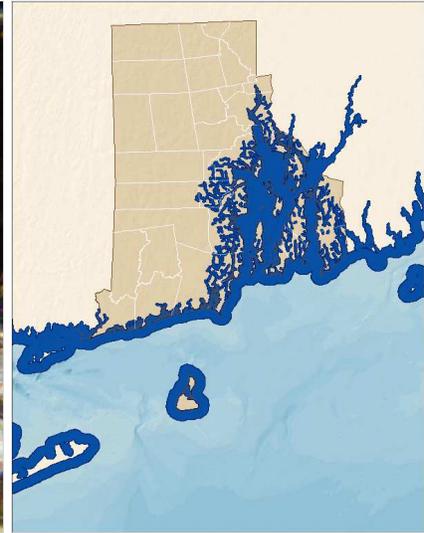
## Grubby Sculpin

*Myoxocephalus aeneus*

**FISH**  
Marine Fish



Photo: Eric Heupel



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Northwest Atlantic: Strait of Belle Isle and Gulf of St. Lawrence in Canada to New Jersey in USA. Overall population abundance is poorly understood but believed to be abundant.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### ***Status***

Climate Change Vulnerability: Low=2100 (Temperature change)

### ***Threats and Actions***

**Threat 1 - Household sewage and urban waste water; Water quality impacts to habitat;**

*Actions:* • *Resource and habitat protection; Protect areas of preferred habitat. Rank: 2*

**Threat 2 - Temperature extremes; Temperature extremes impacting habitat**

*Actions:* • *Data collection and analysis; Create grants to promote research to study the population and human impacts to that population. Rank: 2*

***Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.***

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Oyster Toadfish

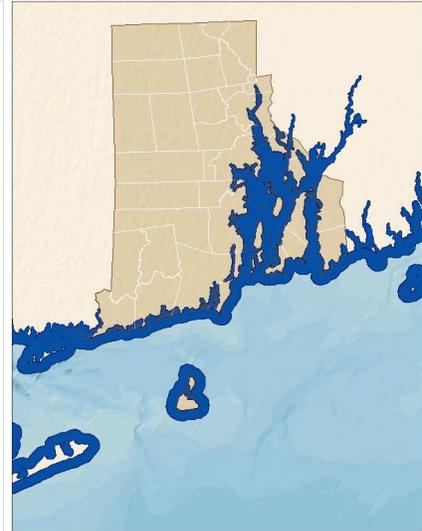
*Opsanus tau*

FISH

Marine Fish



Photo: Robert Golder



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

In the Western Atlantic the oyster toadfish can be found from Cape Cod, Massachusetts to Florida in USA, straggling south to Miami in cold years. This bottom-dweller is found primarily within and around oyster reefs, but also lives among wrecks, debris, rocks, and vegetation. Although abundant through the Chesapeake Bay year round, they are most common in the middle and lower Bay and typically move to the Bay's deep channels during winter.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### **Status**

SRANK: SNR. GRANK: GNR. RSGCN: H-M. Climate Change Vulnerability: Medium=2050 (Habitat loss)

### **Threats and Actions**

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Continue to implement plans to restore spawning population and prevent overharvest. Rank: 3*
  - *Species recovery; Continue to promote management plans to maintain the rebuilding of the stock. Rank: 2*

#### **Threat 2 - Household sewage and urban waste water; Water quality impacts to habitat**

- Actions:
- *Habitat and natural process restoration; Continue to promote the restoration of essential habitats. Rank: 3*
  - *Policies and regulations; Create regulations to prevent or encourage lower bycatch. Rank: 2*

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

**Pollock**

*Pollathius virens*

**FISH**

Marine Fish

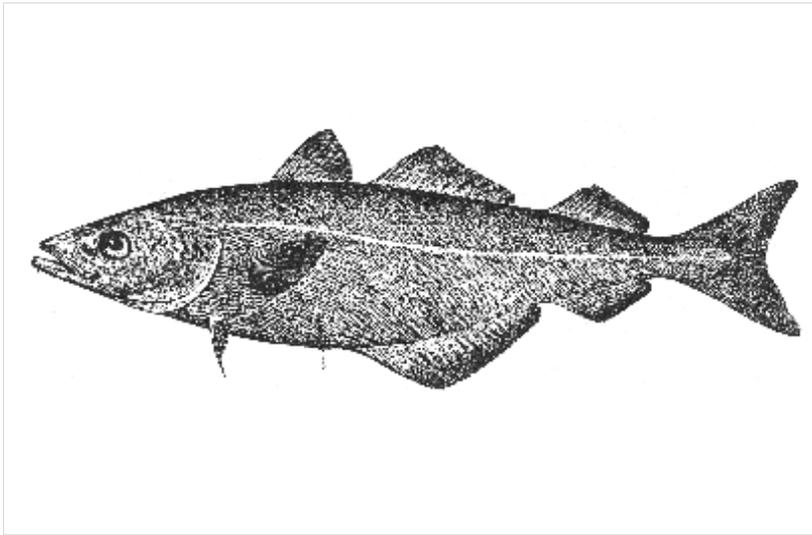
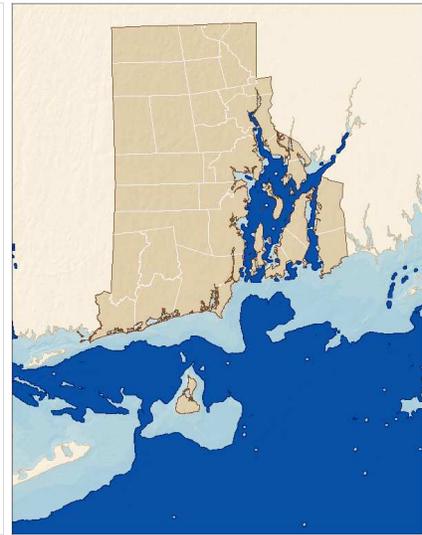


Photo: H. L. Todd; Collette & Klein-MacPhee, 2002, 3rd ed. of "Fishes of the Gulf of Maine"



~See map disclaimer in profiles introduction

***Distribution & Abundance***

Eastern Atlantic: Barents Sea, Spitsbergen to Bay of Biscay, around Iceland. Western Atlantic: southwest Greenland, Hudson Strait to North Carolina, although rare at the extremes of the range. Migrations for spawning are known to occur. Also long-distance north-south migrations for Europe and the US. Overall population size is poorly understood.

Habitat Community: Marine Soft Sediment, Type: Offshore Soft Sediment

***Status***

SRANK: SNR. GRANK: GNR. Climate Change Vulnerability: High=2030 (Habitat loss)

***Threats and Actions***

**Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Continue to implement management plans to restore spawning population and prevent overharvest. Rank: 3*
  - *Policies and regulations; Create regulations to protect spawning populations. Rank: 3*

**Threat 2 - Temperature extremes; Temperature impacting habitat**

- Actions:
- *Data collection and analysis; Create grants to promote research to study impacts beyond fishing related impacts. Rank: 2*

**Refer to the Community: Marine Soft Sediment, Type: Offshore Soft Sediment - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Bluefish

*Pomatomus saltatrix*

FISH

Marine Fish

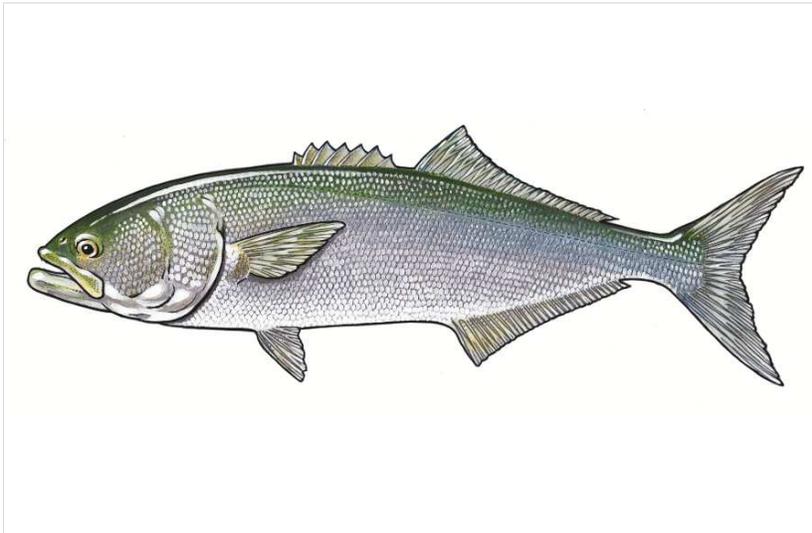
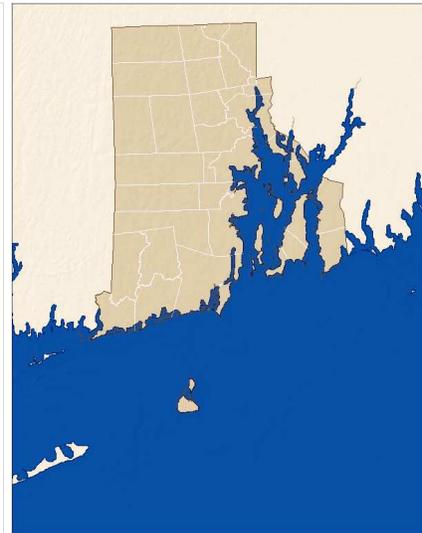


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

Circumglobal: In tropical to subtropical waters; except the eastern Pacific. Eastern Atlantic: Portugal to South Africa, including the Mediterranean and Black Sea, Madeira, and the Canary Islands. Western Atlantic: Canada and Bermuda to Argentina. Indian Ocean: along the coast of East Africa, Madagascar, southern Oman, southwest India, the Malay Peninsula, and Western Australia. Southwest Pacific: Australia except the Northern Territory, and New Zealand. Overall population size is believed to be healthy.

Habitat Community: Pelagic, Type: Marine Pelagic

### **Status**

SRANK: SNR. GRANK: G5. Climate Change Vulnerability: Low=2100 (Food web change/shift)

### **Threats and Actions**

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Resource and habitat protection; Protect areas of preferred habitat. Rank: 2*
  - *Species management; Continue to implement management plans to restore spawning population and prevent overharvest. Rank: 2*
  - *Policies and regulations; Continue to implement regulations to encourage sustainable harvest. Rank: 2*

#### **Threat 2 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Compliance and enforcement; Provide enforcement with resources to enforce protective regulations. Rank: 2*
  - *Data collection and analysis; Create grants to continue to increase biological understanding of bluefish as well as promote research to study population impacts beyond fishing related impacts. Rank: 2*

**Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Northern Sea Robin

*Prionotus carolinus*

FISH

Marine Fish

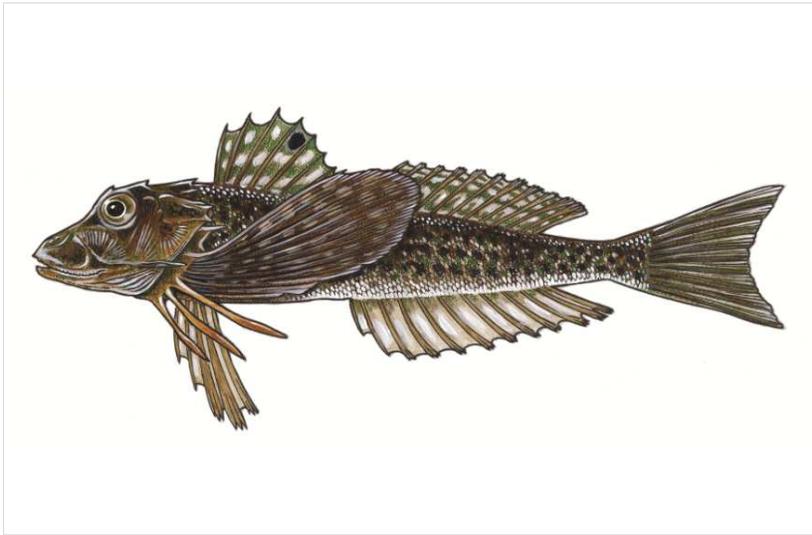
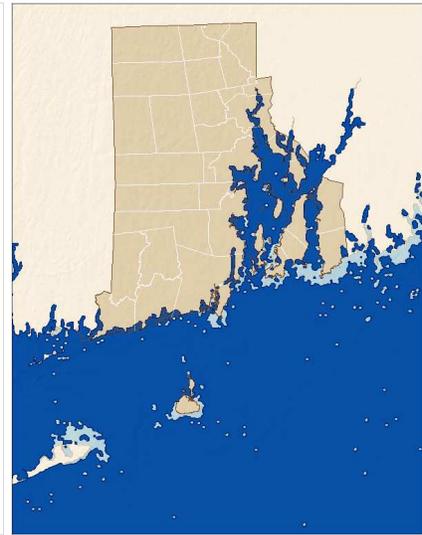


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

Western Atlantic: Nova Scotia in Canada to central Florida in USA. Gulf of Mexico. Overall population is poorly understood, but species replacement by striped sea robin in parts of its range are a concern.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### **Status**

SRANK: SNR. GRANK: G5. RSGCN: H-L. Climate Change Vulnerability: Medium=2050 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Problematic native species; Replacement by striped sea robin**

- Actions:
- *Resource and habitat protection; Protect areas of preferred habitat. Rank: 2*
  - *Species management; Create management plans to restore spawning population and prevent overharvest. Rank: 2*
  - *Policies and regulations; Create enforceable regulations to promote sustainability of species. Rank: 2*
  - *Compliance and enforcement; Create enforceable regulations to promote sustainability of species. Rank: 2*

#### **Threat 2 - Temperature extremes; Due to climate change and severe weather**

- Actions:
- *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 2*

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Winter Flounder

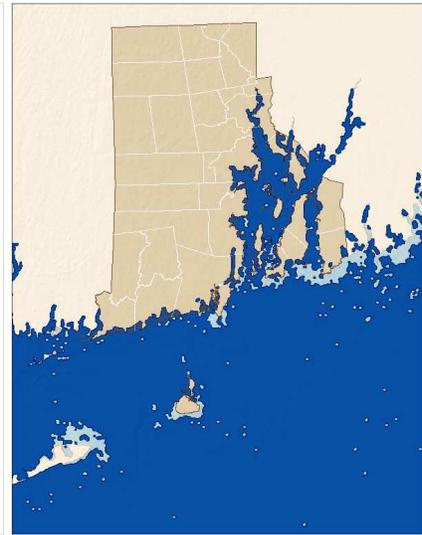
*Pseudopleuronectes americanus*

FISH

Marine Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Western Atlantic: Labrador, Canada to Georgia, USA. Population is believed to be impacted and at low levels.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### ***Status***

SRANK: SNR. GRANK: G5. RSGCN: H-M. NALCC: RES. NAWCA: 1. Climate Change Vulnerability: High=2030 (Temperature change)

### ***Threats and Actions***

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Continue to implement management plans to restore spawning population and prevent overharvest. Rank: 3*
  - *Species recovery; Promote management plans to maintain the rebuilding of the stock. Rank: 3*
  - *Policies and regulations; Create regulations to encourage sustainable harvest. Rank: 3*

#### **Threat 2 - Invasive non-native/alien species; Predation impacts from non native species and species expanding their range**

- Actions:
- *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 3*
  - *Policies and regulations; Create regulations to encourage sustainable harvest. Rank: 3*

#### **Threat 3 - Temperature extremes; Temperature impacting habitat**

- Actions:
- *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts, such as replacement by non-native striped sea robin. Rank: 3*

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

**Skates**

**FISH**  
Marine Fish

*Raja spp.*

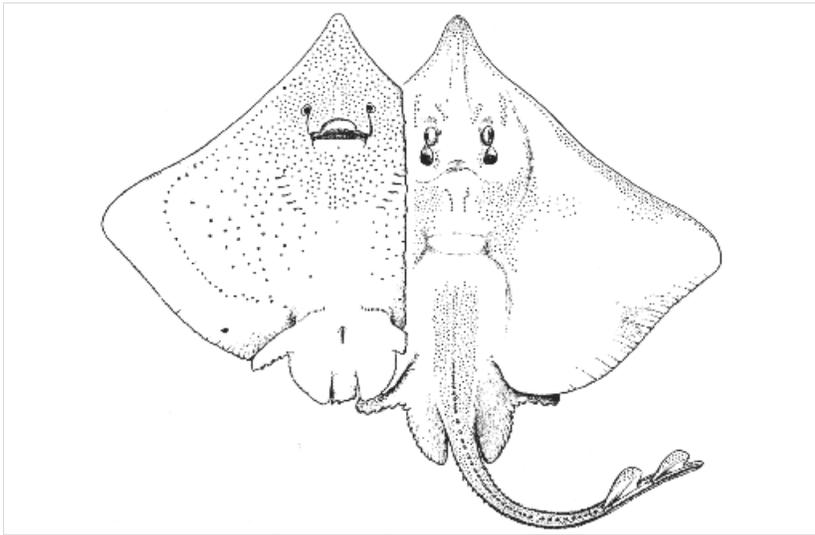
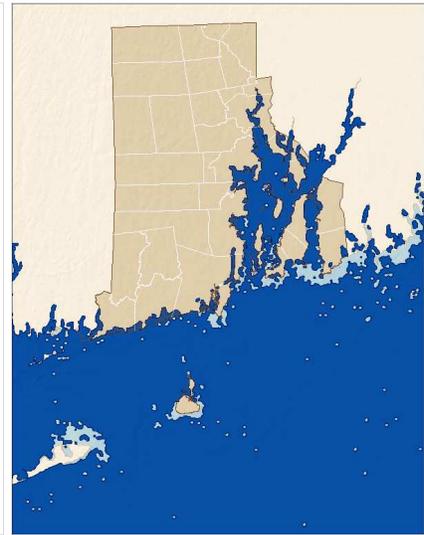


Photo: E. N. Fischer; Collette & Klein-MacPhee, 2002, 3rd ed. of "Fishes of the Gulf of Maine"



~See map disclaimer in profiles introduction

***Distribution & Abundance***

Western Atlantic: Newfoundland Banks and southern Gulf of St. Lawrence in Canada to North Carolina, USA. Possesses life history characteristics (including delayed age at maturity, long generation time, low fecundity, and consequently slow population growth) that may increase its vulnerability to exploitation, and reduce its rate of recovery. Population trends vary for different species and in different areas of the range.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

***Status***

IUCN Rank: multiple species with differing ranks. NALCC: M. NATerns: 1. Climate Change Vulnerability: Low=2100 (Food web change/shift)

***Threats and Actions***

**Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Species management; Continue to implement management plans to restore spawning population and prevent overharvest. Rank: 2*
  - *Species recovery; Promote management plans to maintain the rebuilding of the stock. Rank: 2*

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Windowpane

*Scophthalmus aquosus*

FISH

Marine Fish

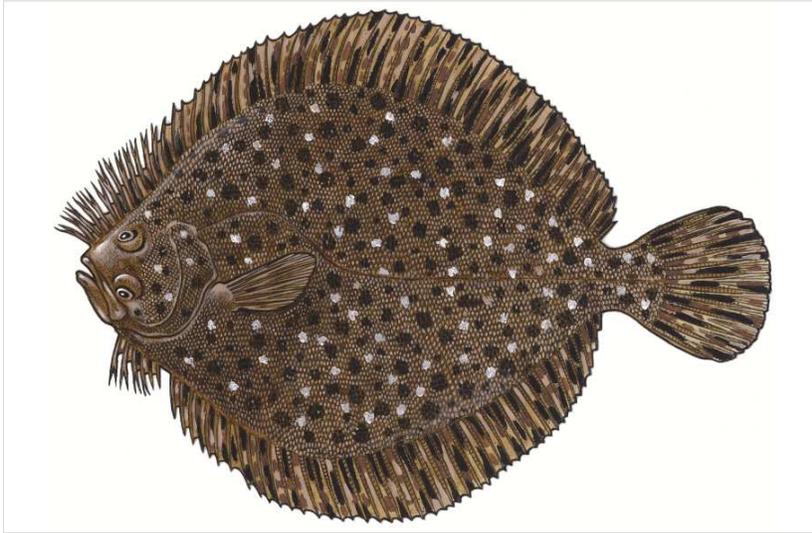
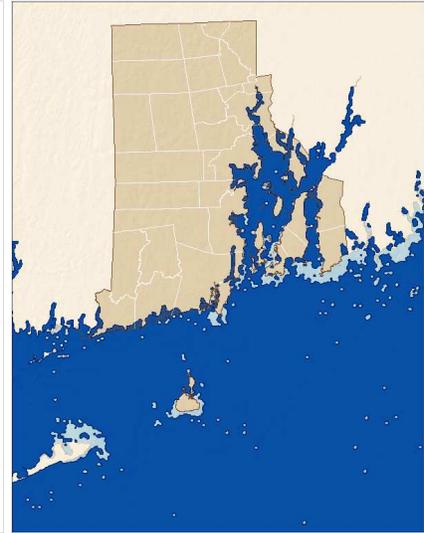


Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Western Atlantic: Gulf of St. Lawrence in Canada to northern Florida in USA. Overall population is poorly understood but believed to be in poor condition.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### ***Status***

SRANK: SNR. GRANK: G5. RSGCN: H-L. NALCC: RES. NAWCA: 1. Climate Change Vulnerability: High=2030 (Temperature change)

### ***Threats and Actions***

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#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:*
- *Species management; Create management plans to restore spawning population and prevent overharvest. Rank: 3*
  - *Policies and regulations; Create regulations to encourage sustainable harvest. Rank: 3*

***Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.***

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Spiny Dogfish

*Squalus acanthias*

FISH

Marine Fish

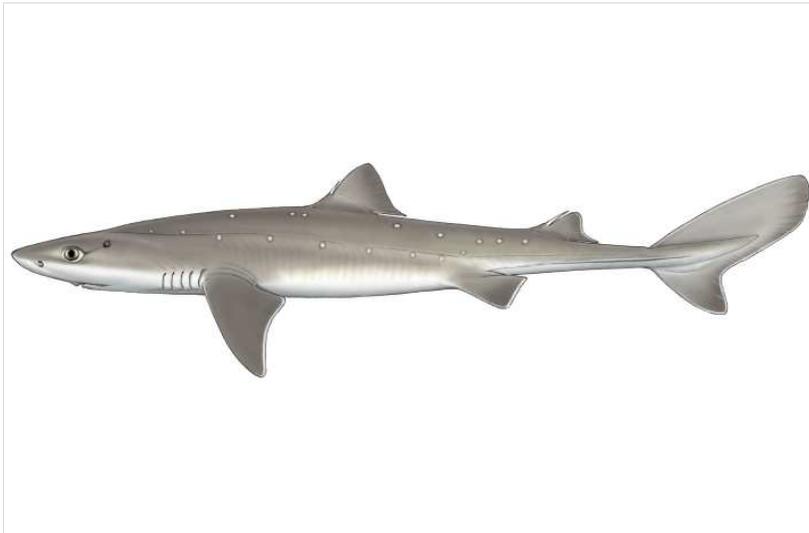
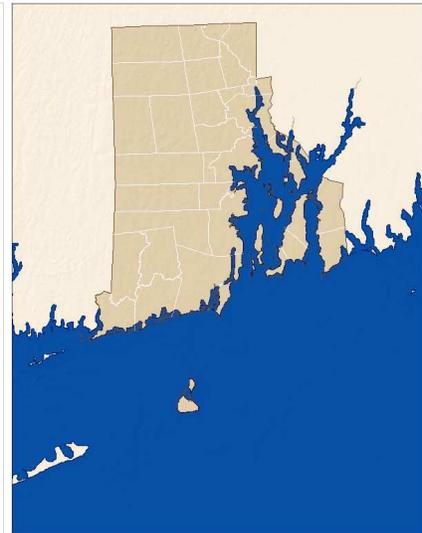


Photo: Marc Dando



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

Western Atlantic: Greenland to Argentina. Eastern Atlantic: Iceland and the Barents Sea to Western Sahara and the Canary Islands and in the Mediterranean and Black Seas and Angola to South Africa. Indo-Pacific. Overall population is believed to be healthy.

Habitat Community: Marine Soft Sediment, Type: Offshore Soft Sediment

### ***Status***

SRANK: SNR. GRANK: GNR. RSGCN: H-L. Climate Change Vulnerability: Low=2100 (Habitat loss)

### ***Threats and Actions***

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:*
- *Species management; Continue to implement management plans to restore spawning population and prevent overharvest. Rank: 2*
  - *Species recovery; Continue to promote management plans to maintain the rebuilding of the stock. Rank: 2*

***Refer to the Community: Marine Soft Sediment, Type: Offshore Soft Sediment - Habitat Profile for additional threats to this species.***

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Tautog

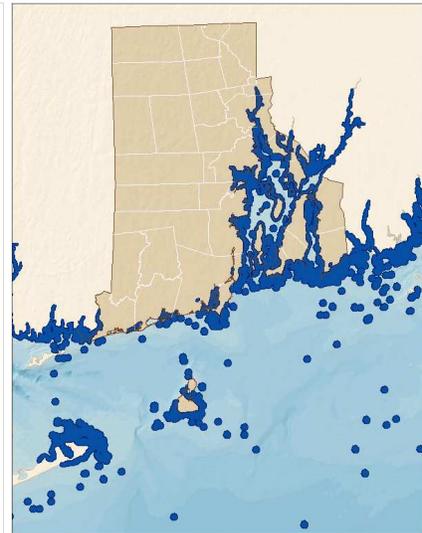
*Tautoga onitis*

FISH

Marine Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### **Distribution & Abundance**

Western Atlantic: slightly east of Halifax in Nova Scotia, Canada to South Carolina in USA; most abundant between Cape Cod and Delaware Bay. Population believed to be in poor condition, though fishing pressure has been curtailed through regulation. Sub structure in the stock may be important and is not currently accounted for in the population status finding.

Habitat Community: Marine Rocky Reef, Type: Hard, Rocky Bottom

### **Status**

IUCN Rank: VU. SRANK: SNR. GRANK: GNR. RSGCN: H-L. Climate Change Vulnerability: Medium=2050 (Temperature change)

### **Threats and Actions**

#### **Threat 1 - Fishing and harvesting aquatic resources; Fishing impacting population sustainability**

- Actions:
- *Resource and habitat protection; Protect areas of preferred habitat. Rank: 3*
  - *Habitat and natural process restoration; Promote the restoration and enhancement of essential habitats. Rank: 3*
  - *Species recovery; Strengthen current management program to increase the speed of recovery. Rank: 3*
  - *Policies and regulations; Strengthen current management program to increase the speed of recovery. Rank: 3*
  - *Compliance and enforcement; Strengthen current management plan to increase the speed of recovery. Rank: 3*

#### **Threat 2 - Temperature extremes; Temperature extremes impacting juvenile life stages**

- Actions:
- *Data collection and analysis; Create grants to promote research to study population impacts beyond fishing related impacts. Rank: 2*

**Refer to the Community: Marine Rocky Reef, Type: Hard, Rocky Bottom - Habitat Profile for additional threats to this species.**

*DRAFT Rhode Island Wildlife Action Plan Species Profiles*  
**Species of Greatest Conservation Need**

## Hogchoker

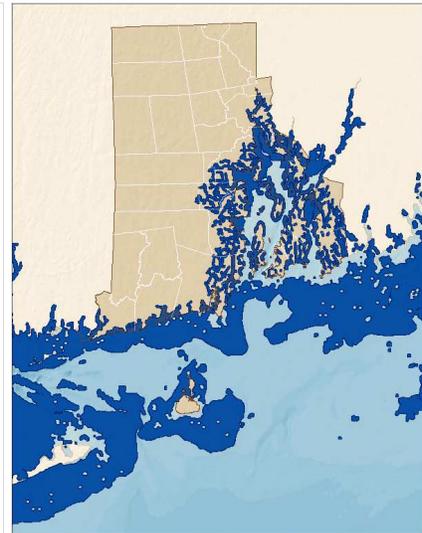
*Trinectes maculatus*

FISH

Marine Fish



Photo: Roberta Furgalack



~See map disclaimer in profiles introduction

### ***Distribution & Abundance***

In the Western Central Atlantic, the hogchoker can be found from Massachusetts to Florida, throughout the Gulf of Mexico, to Panama. The overall population condition is poorly understood, but believed to be at depressed levels particularly in Northern estuaries.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### ***Status***

SRANK: SNR. GRANK: G5. NALCC: RES. NAWCA: 1. Climate Change Vulnerability: High=2030 (Temperature change)

### ***Threats and Actions***

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**Threat 1 - Household sewage and urban waste water; Water quality impacts to habitat;**

- Actions:
- *Resource and habitat protection; Protect areas of preferred habitat. Rank: 2*
  - *Habitat and natural process restoration; Promote the restoration of essential habitats. Rank: 2*

**Threat 2 - Household sewage and urban waste water; Development impacting habitat quality**

- Actions:
- *Site/area management; Restore vegetated buffers, implement stormwater controls, reduce nutrient pollution, reduce impervious surfaces, and other watershed protection actions. Rank: 2*

**Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.**