

*Orconectes eupunctus*

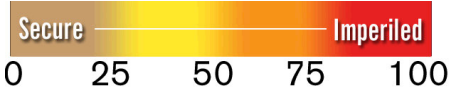
**Coldwater Crayfish**

**Class:** Malacostraca

**Order:** Decapoda

**Family:** Cambaridae

**Priority Score:** **50 out of 100**



**Population Trend:** Unknown

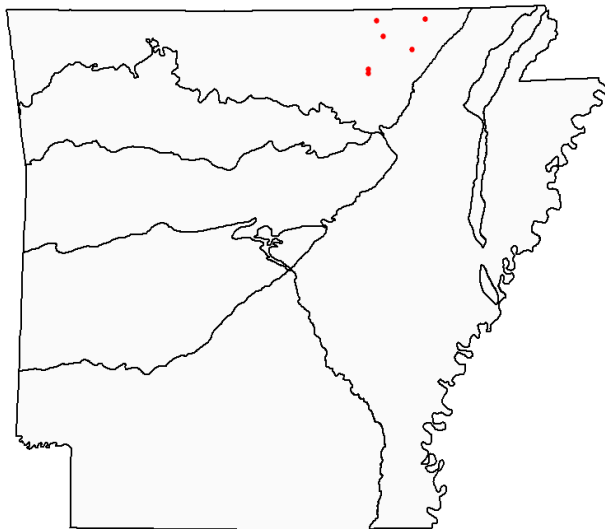


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**G Rank:** G2 – Imperiled species

**S Rank:** S1 – Critically imperiled in Arkansas

**Distribution**



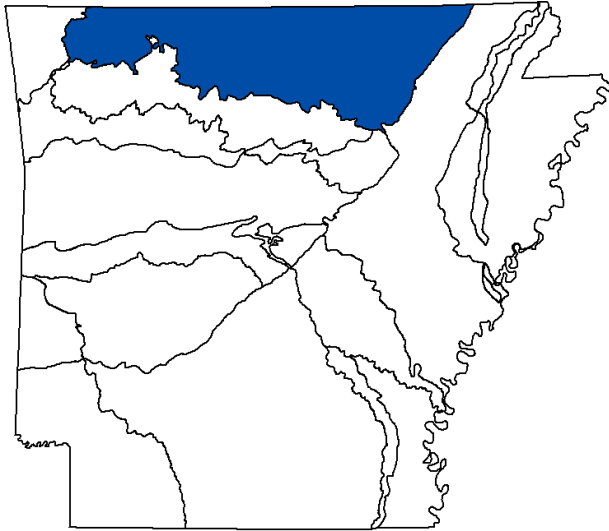
**Ecoregions where the species occurs:**

- Ozark Highlands
- Boston Mountains
- Arkansas Valley
- Ouachita Mountains
- Mississippi Valley Loess Plains
- Mississippi Alluvial Plain
- South Central Plains

**Element Occurrence Records**

**Taxa Association Team and Reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where the species occurs**

**Ecobasins**

Ozark Highlands - White River

**Habitats**

Natural Riffle: - Medium

Natural Run: - Medium

**Weight**

Optimal

Optimal

**Problems Faced**

Threat: Biological alteration

Source: Exotic species

Threat: Habitat disturbance

Source: Resource extraction

Threat: Sedimentation

Source: Forestry activities

Threat: Sedimentation

Source: Road construction

**Data Gaps/Research Needs**

Survey for additional populations.

**Conservation Actions**

**Importance**

**Category**

Medium

Threat Abatement

Maintain or, where necessary, restore water quality and stream habitat.

Medium

Habitat Protection

**Monitoring Strategies**

Monitor known occurrences.

### Comments

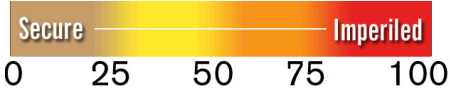
Description: a rather small, stout crayfish with reddish brown thorax and abdomen (Pflieger 1996).

Endemic to the Eleven Point and Spring River drainages of Arkansas and Missouri (Williams 1954).

*Orconectes macrus*  
Neosho Midget Crayfish

Class: Malacostraca  
Order: Decapoda  
Family: Cambaridae

Priority Score: **23 out of 100**



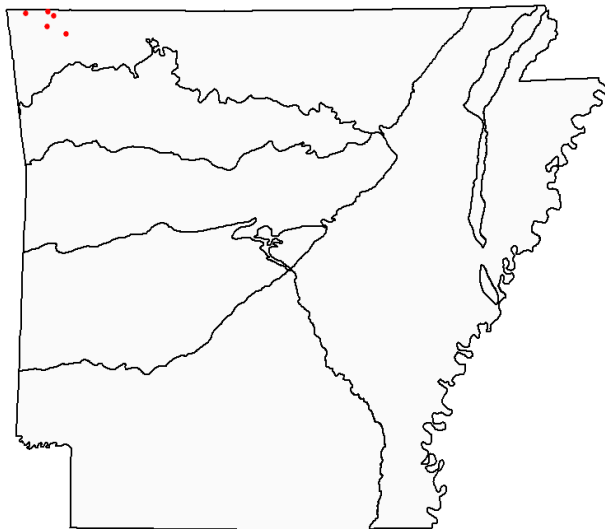
Population Trend: Unknown



G Rank: G4 – Apparently secure species

S Rank: S2 – Imperiled in Arkansas

**Distribution**



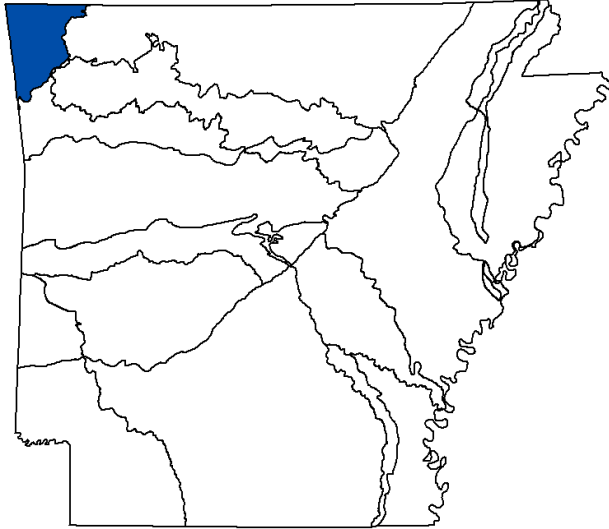
Ecoregions where the species occurs:

- Ozark Highlands
- Boston Mountains
- Arkansas Valley
- Ouachita Mountains
- Mississippi Valley Loess Plains
- Mississippi Alluvial Plain
- South Central Plains

**Element Occurrence Records**

**Taxa Association Team and Reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where the species occurs**

**Ecobasins**

Ozark Highlands - Arkansas River

<b>Habitats</b>	<b>Weight</b>
Natural Pool: Headwater - Small	Suitable
Natural Riffle: Headwater - Small	Optimal
Natural Run: Headwater - Small	Optimal
Natural Spring Run: Headwater	Suitable

**Problems Faced**

Threat: Habitat destruction  
Source: Urban development

Threat: Habitat disturbance  
Source: Forestry activities

Threat: Habitat disturbance  
Source: Resource extraction

Threat: Sedimentation  
Source: Road construction

Threat: Sedimentation  
Source: Urban development

**Data Gaps/Research Needs**

Determine species distribution in Arkansas.

Determine taxonomic and genetic relationship to *O. nana*.

**Conservation Actions**

	<b>Importance</b>	<b>Category</b>
More data is needed to determine conservation actions.	Medium	Data Gap

## Monitoring Strategies

More information is needed before a monitoring strategy can be developed.

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## Comments

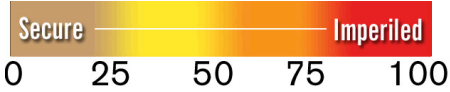
Description: a diminutive crayfish (maximum 2 inch total length), tan with a black or olive saddle and sometimes dark brown or black speckles (Pflieger 1996, Brian K. Wagner, personal communication).

Inhabits clear gravelly streams of the Arkansas River drainage in extreme northwest Arkansas and adjacent states (Pflieger 1996). The separation between *O. macrus* and *O. nana* is somewhat unclear and warrants further study.

*Orconectes marchandi*  
Mammoth Spring Crayfish

Class: Malacostraca  
Order: Decapoda  
Family: Cambaridae

Priority Score: **46 out of 100**



Population Trend: Unknown

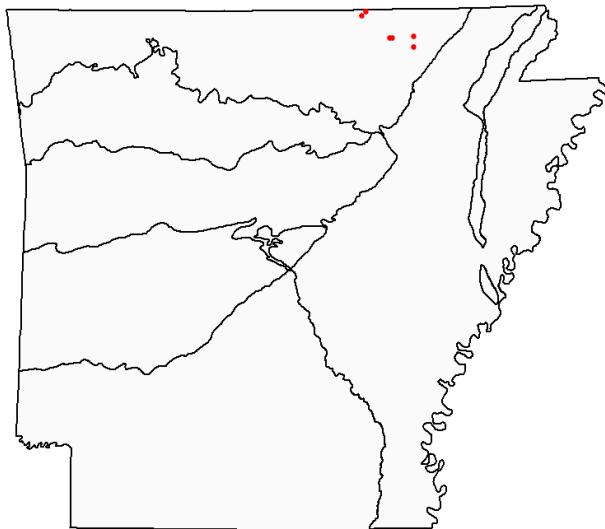


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G Rank: G2 – Imperiled species

S Rank: S2 – Imperiled in Arkansas

**Distribution**



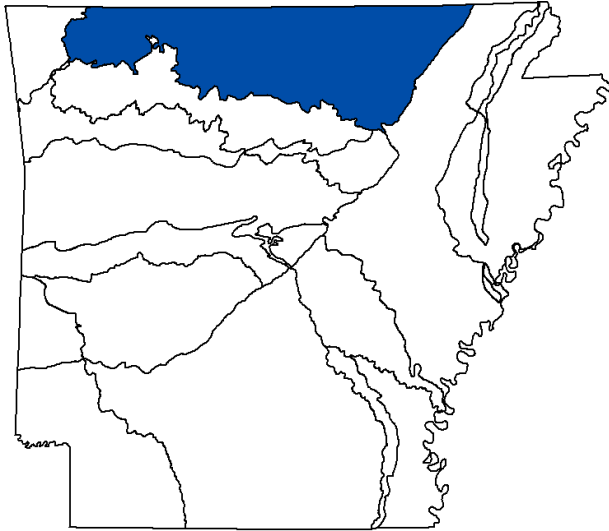
Ecoregions where the species occurs:

- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Element Occurrence Records**

**Taxa Association Team and Reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where the species occurs**

**Ecobasins**

Ozark Highlands - White River

**Habitats**

Natural Pool: - Small - Medium

Natural Riffle: - Small - Medium

Natural Run: - Small - Medium

**Weight**

Marginal

Optimal

Suitable

**Problems Faced**

Threat: Biological alteration

Source: Exotic species

Threat: Chemical alteration

Source: Recreation

Threat: Riparian Habitat Destruction

Source: Channel alteration

Threat: Sedimentation

Source: Recreation

**Data Gaps/Research Needs**

Survey for additional populations.

**Conservation Actions**

**Importance**

**Category**

Medium

Habitat Protection

Maintain or, where necessary, restore water quality and stream habitat.

Medium

Habitat Restoration/Improvement

**Monitoring Strategies**

Monitor known occurrences.



## Comments

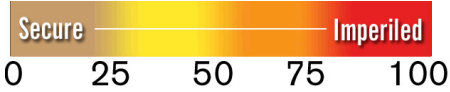
Description: a medium-sized reddish brown crayfish (Pflieger 1996)

This crayfish has a very limited distribution in the Spring River and its tributaries in three counties of Arkansas and Missouri (Pflieger 1996). Introduced ringed crayfish may adversely affect the species (Dan Magoulick, personal communication).

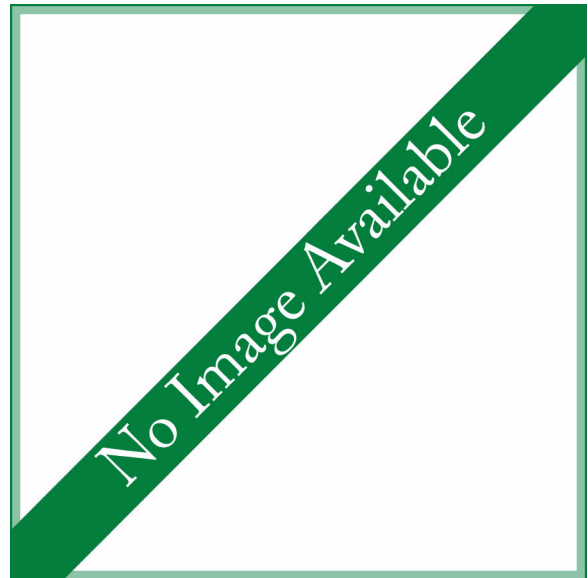
*Orconectes meeki brevis*  
crayfish

Class: Malacostraca  
Order: Decapoda  
Family: Cambaridae

Priority Score: **34 out of 100**



Population Trend: Unknown



**G Rank:** G4T3 – Apparently secure (vulnerable subspecies)

**S Rank:** S1 – Critically imperiled in Arkansas

**Distribution**



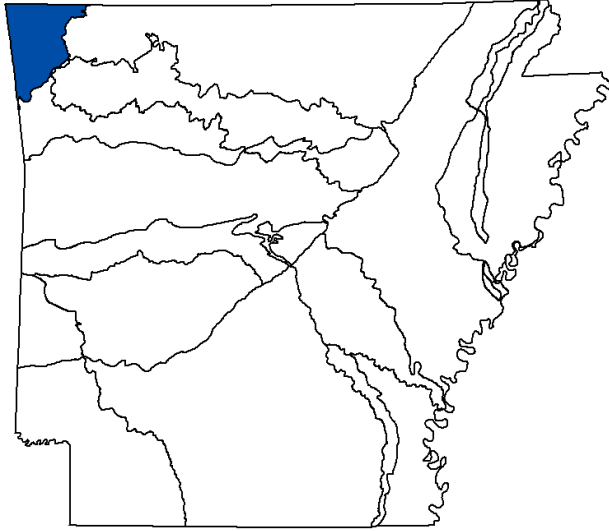
**Element Occurrence Records**

Ecoregions where the species occurs:

- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Association Team and Reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where the species occurs**

**Ecobasins**

Ozark Highlands - Arkansas River

**Habitats**

**Weight**

Natural Pool: Headwater - Small	Data Gap
Natural Riffle: Headwater - Small	Data Gap
Natural Run: Headwater - Small	Data Gap

**Problems Faced**

Threat: Habitat destruction  
Source: Urban development

Threat: Nutrient loading  
Source: Urban development

Threat: Sedimentation  
Source: Road construction

Threat: Sedimentation  
Source: Urban development

**Data Gaps/Research Needs**

Establish genetic status relative to other subspecies.

Survey for additional populations.

**Conservation Actions**

**Importance**

**Category**

	Medium	Habitat Restoration/Improvement
Maintain or, where necessary, restore water quality and stream habitat.	Medium	Habitat Protection

**Monitoring Strategies**

Monitor known occurrences.

### Comments

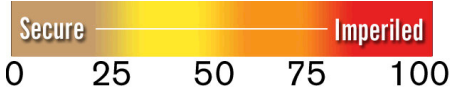
Description: a rather plain brown, medium-sized crayfish (Pflieger 1996).

Inhabits rocky streams in extreme northwest Arkansas and eastern Oklahoma (Hobbs 1989).

*Orconectes menae*  
crayfish

Class: Malacostraca  
Order: Decapoda  
Family: Cambaridae

Priority Score: **27 out of 100**



Population Trend: Unknown



G Rank: G3 – Vulnerable species  
S Rank: S3 – Vulnerable in Arkansas

**Distribution**



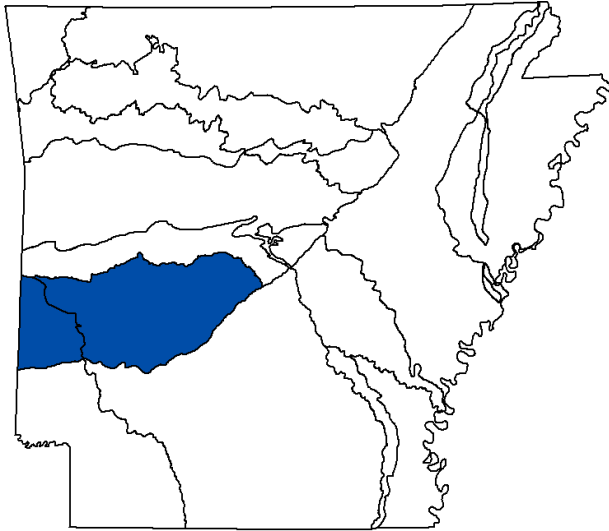
**Element Occurrence Records**

Ecoregions where the species occurs:

- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Association Team and Reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where the species occurs**

**Ecobasins**

Ouachita Mountains - Ouachita River

Ouachita Mountains - Red River

**Habitats**

Natural Pool: - Small - Medium

Natural Riffle: - Small - Medium

Natural Run: - Small - Medium

**Weight**

Data Gap

Data Gap

Data Gap

**Problems Faced**

Threat: Habitat disturbance

Source: Forestry activities

Threat: Sedimentation

Source: Road construction

**Data Gaps/Research Needs**

Survey for additional populations.

**Conservation Actions**

**Importance**

**Category**

Medium

Habitat Restoration/Improvement

Maintain or, where necessary, restore water quality and stream habitat.

Medium

Habitat Protection

**Monitoring Strategies**

Monitor known occurrences.

### Comments

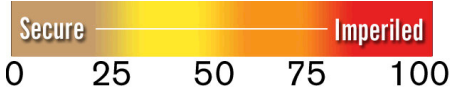
Description: a medium-sized olive to brown crayfish (Brian K. Wagner, personal communication).

Restricted to four counties in the upper Ouachitas of extreme western Arkansas and eastern Oklahoma (Hobbs 1989).

*Orconectes nana*  
crayfish

**Class:** Malacostraca  
**Order:** Decapoda  
**Family:** Cambaridae

**Priority Score: 30 out of 100**



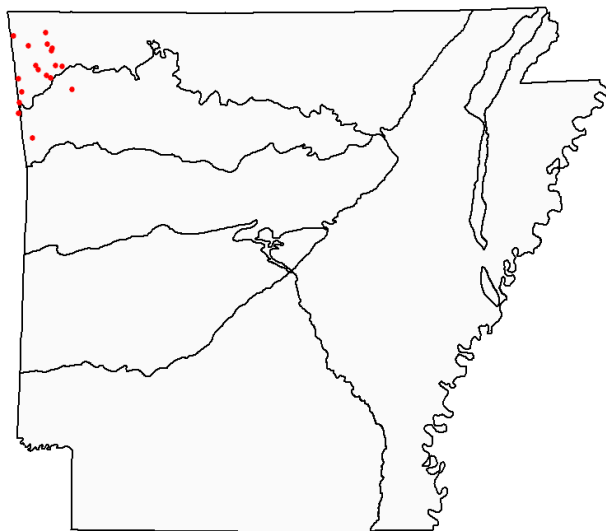
**Population Trend:** Unknown

**G Rank:** G3 – Vulnerable species

**S Rank:** S2 – Imperiled in Arkansas



**Distribution**



**Ecoregions where the species occurs:**

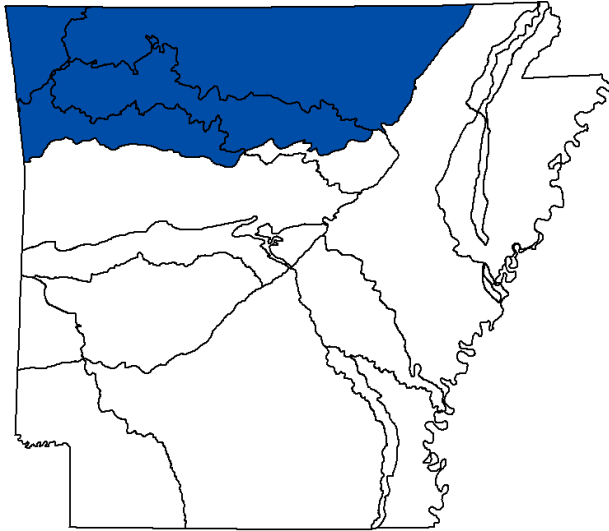
- Ozark Highlands
- Boston Mountains
- Ouachita Mountains
- Mississippi Valley Loess Plains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains

**Element Occurrence Records**

**Taxa Association Team and Reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner





**Ecobasins where the species occurs**

**Ecobasins**

Boston Mountains - Arkansas River

Boston Mountains - White River

Ozark Highlands - Arkansas River

Ozark Highlands - White River

**Habitats**

**Weight**

Natural Pool: - Small - Medium

Data Gap

Natural Riffle: - Small - Medium

Data Gap

Natural Run: - Small - Medium

Data Gap

**Problems Faced**

Threat: Habitat destruction

Source: Urban development

Threat: Nutrient loading

Source: Urban development

Threat: Sedimentation

Source: Road construction

Threat: Sedimentation

Source: Urban development

**Data Gaps/Research Needs**

Determine taxonomic and genetic relationship to *O. macrus*.

Survey for additional populations.

**Conservation Actions**

**Importance**

**Category**

Maintain or, where necessary, restore water quality and stream habitat.

Medium

Habitat Protection

## Monitoring Strategies

Monitor known occurrences.

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## Comments

Description: a diminutive crayfish (maximum 2 inches long), tan with a dark saddle and may have brown speckles (Chris Taylor, personal communication)

Inhabits clear gravelly streams of the Arkansas River drainage in northwest Arkansas and northeast Oklahoma (Williams 1954). The separation between *O. macrus* and *O. nana* is somewhat unclear and warrants further study.

*Orconectes neglectus chaenodactylus*

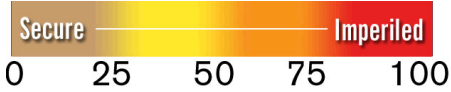
**Ringed Crayfish**

**Class:** Malacostraca

**Order:** Decapoda

**Family:** Cambaridae

**Priority Score:** **34 out of 100**



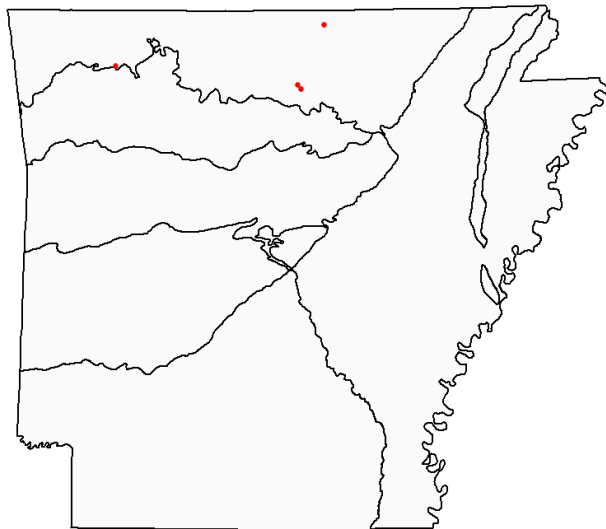
**Population Trend:** Increasing



**G Rank:** G5T2 – Secure (imperiled subspecies)

**S Rank:** S2 – Imperiled in Arkansas

**Distribution**



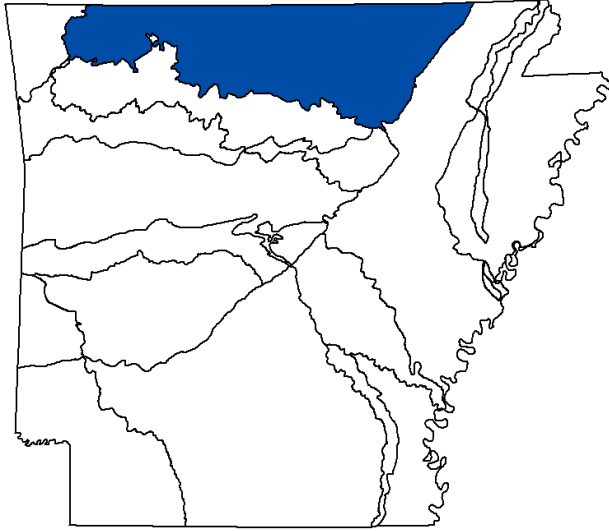
**Ecoregions where the species occurs:**

- Ozark Highlands
- Boston Mountains
- Arkansas Valley
- Ouachita Mountains
- Mississippi Valley Loess Plains
- Mississippi Alluvial Plain
- South Central Plains

**Element Occurrence Records**

**Taxa Association Team and Reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where the species occurs**

**Ecobasins**

Ozark Highlands - White River

**Habitats**

**Weight**

Natural Pool: Headwater - Small - Medium	Suitable
Natural Riffle: Headwater - Small - Medium	Suitable
Natural Run: Headwater - Small - Medium	Suitable

**Problems Faced**

Threat: Habitat disturbance  
Source: Resource extraction

Threat: Riparian Habitat Destruction  
Source: Road construction

Threat: Sedimentation  
Source: Forestry activities

Threat: Sedimentation  
Source: Road construction

**Data Gaps/Research Needs**

Establish genetic status relative to other subspecies.

Survey for additional populations.

**Conservation Actions**

**Importance**

**Category**

Maintain or, where necessary, restore water quality and stream habitat.	Medium	Habitat Restoration/Improvement
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**Monitoring Strategies**

Monitor known occurrences.

### Comments

Description: a medium to large, brown crayfish with a dark saddle, a pale band on lower side of abdomen, red-tipped claws with brown or black ring around tip (Pflieger 1996).

This subspecies is restricted to the area from the North Fork White River Basin to Sylamore Creek (Hobbs 1989). It has recently appeared in the Spring River basin (Dan Magoulick, personal communication).

*Orconectes williamsi*

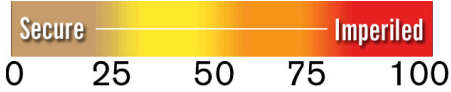
**William's Crayfish**

**Class:** Malacostraca

**Order:** Decapoda

**Family:** Cambaridae

**Priority Score:** **50 out of 100**



**Population Trend:** Unknown

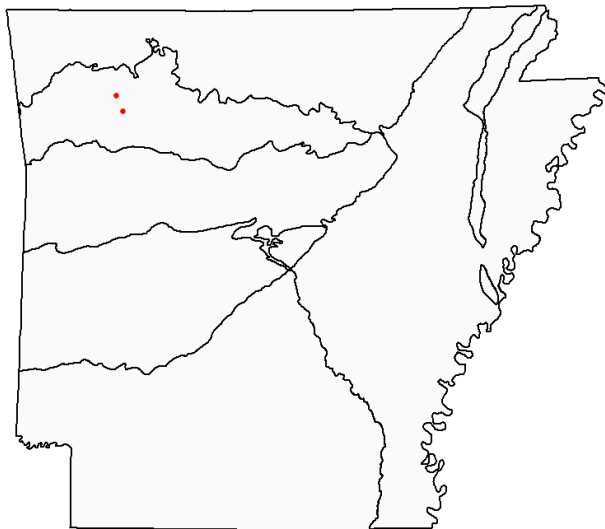


©Brian Wagner

**G Rank:** G2 – Imperiled species

**S Rank:** S1 – Critically imperiled in Arkansas

**Distribution**



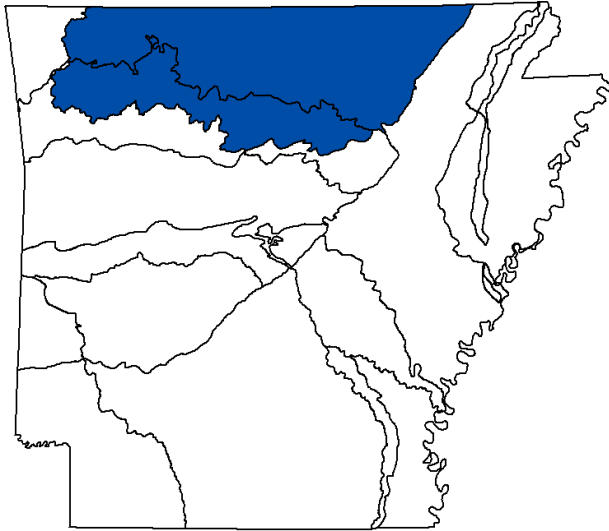
**Ecoregions where the species occurs:**

- Ozark Highlands
- Boston Mountains
- Ouachita Mountains
- Mississippi Valley Loess Plains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains

**Element Occurrence Records**

**Taxa Association Team and Reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where the species occurs**

**Ecobasins**

Boston Mountains - White River

Ozark Highlands - White River

**Habitats**

**Weight**

Natural Pool: Headwater - Small	Suitable
Natural Riffle: Headwater - Small	Suitable
Natural Run: Headwater - Small	Optimal
Natural Spring Run: Headwater - Small	Optimal

**Problems Faced**

Threat: Habitat destruction  
Source: Urban development

Threat: Habitat disturbance  
Source: Resource extraction

Threat: Habitat disturbance  
Source: Road construction

Threat: Nutrient loading  
Source: Urban development

**Data Gaps/Research Needs**

Survey for additional populations.

**Conservation Actions**

**Importance**

**Category**

Maintain or, where necessary, restore water quality and stream habitat.	Medium	Habitat Protection
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**Monitoring Strategies**

Monitor known occurrences.

### Comments

Description: a small crayfish (shorter than 2 inches long) that is gray to tan in color with a vase shaped pale zone on the carapace (Plieger 1996).

This species has localized occurrences in small headwater creeks of the upper White River basin. Status surveys are in progress in Missouri (Bob Destefano, personal communication) and Arkansas (Brian K Wagner, personal communication).



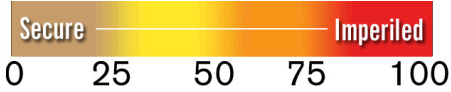
*Bouchardina robisoni*  
crayfish

Class: Malacostraca

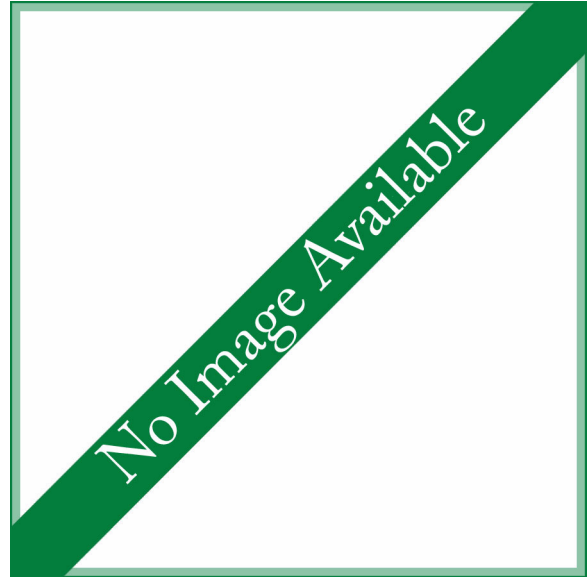
Order: Decapoda

Family: Cambaridae

Priority Score: **80 out of 100**



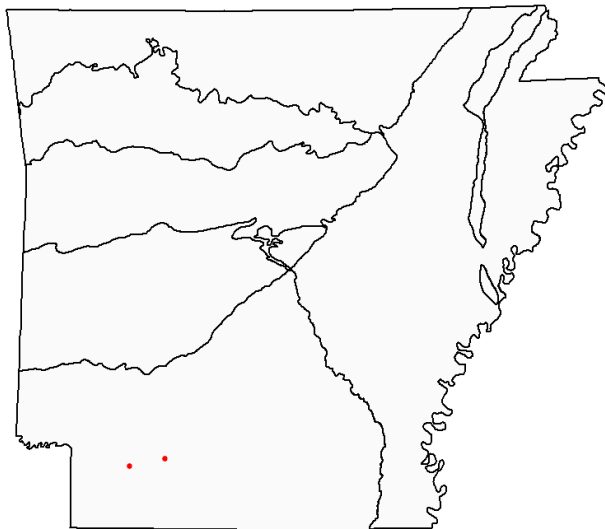
Population Trend: Unknown



G Rank: G1 – Critically imperiled species

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



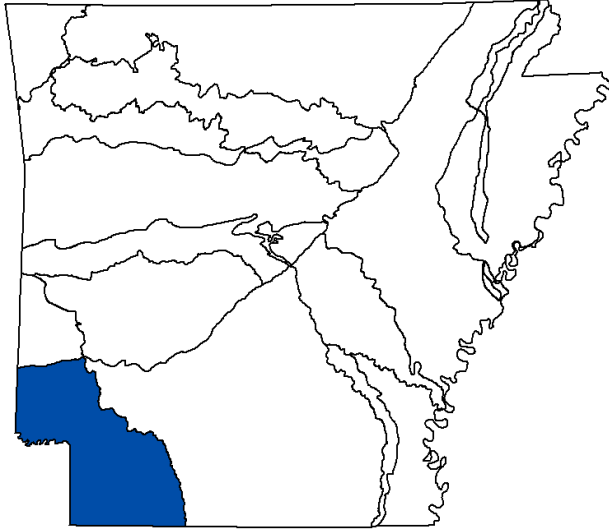
**Element Occurrence Records**

Ecoregions where the species occurs:

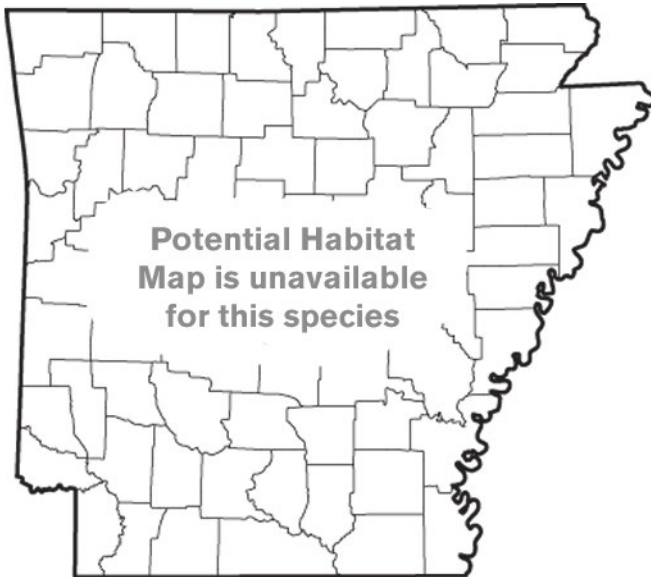
- Ozark Highlands
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- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

South Central Plains - Red River

**Terrestrial Habitats**

West Gulf Coastal Plain Seepage Swamp and Baygall      Data Gap

**Aquatic Habitats**

Natural Pool: Headwater      Data Gap

Natural Riffle: Headwater      Data Gap

Natural Seep: Headwater - Small      Data Gap

Natural Swamp/Wetlands: Headwater - Small      Data Gap

**Problems Faced**

Threat: Habitat disturbance  
Source: Road construction

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Threat: Hydrological alteration  
Source: Forestry activities

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Threat: Toxins/contaminants  
Source: Road construction

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**Data Gaps/Research Needs**

Survey for additional populations.

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**Conservation Actions**

Importance	Category
Medium	Threat Abatement

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Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection
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**Monitoring Strategies**

Monitor known occurrences.

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**Comments**

Description: a small (approximately 1/2 inch carapace length), grayish-tan crayfish with reddish-tan carapace with U-shaped rust markings on the sides (Hobbs 1977).

This species is an Arkansas endemic known from few sites. A study is currently underway to assess its status and distribution (Robison, Henry W., personal communication).

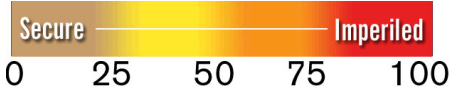
*Cambarus aculabrum*  
crayfish

Class: Malacostraca

Order: Decapoda

Family: Cambaridae

Priority Score: **80 out of 100**



Population Trend: Stable

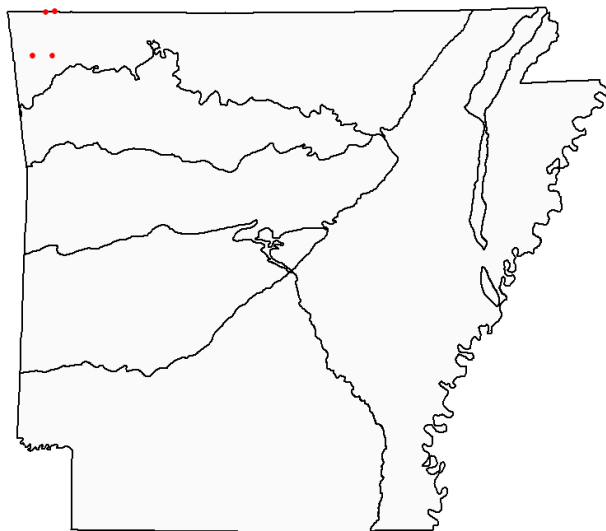


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G Rank: G1 – Critically imperiled species

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



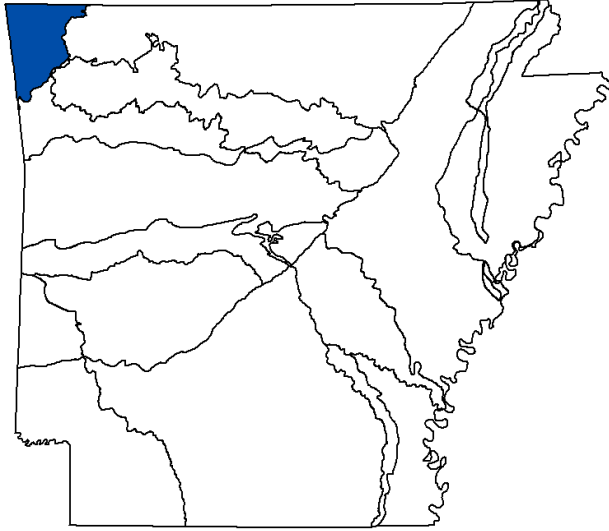
**Element Occurrence Records**

Ecoregions where the species occurs:

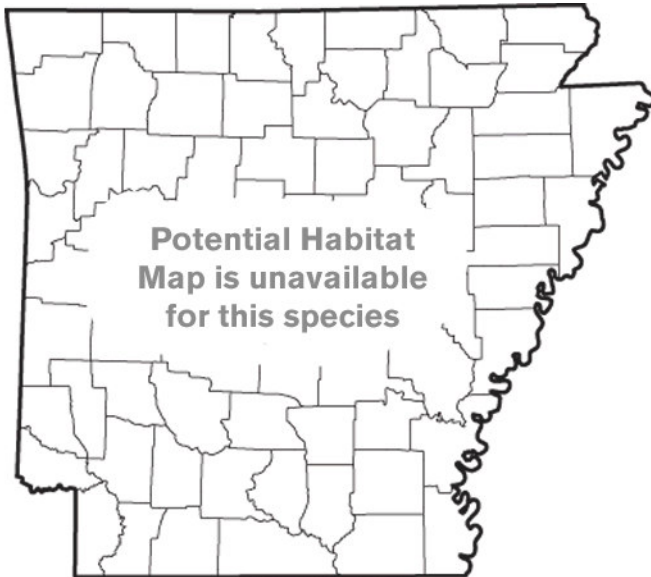
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**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Ozark Highlands - Arkansas River

**Terrestrial Habitats**

Caves, Mines & Karst Habitat Obligate

**Aquatic Habitats**

Natural Cave Stream: - Small - Medium Obligate

Natural Groundwater: Obligate

Natural Spring Run: Headwater Marginal

## Problems Faced

Threat: Hydrological alteration  
Source: Urban development

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Threat: Nutrient loading  
Source: Confined animal operations

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Threat: Nutrient loading  
Source: Urban development

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Threat: Sedimentation  
Source: Road construction

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Threat: Toxins/contaminants  
Source: Confined animal operations

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## Data Gaps/Research Needs

Determine life history information.

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Determine taxonomic relationships.

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Survey and model for additional populations.

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## Conservation Actions

	Importance	Category
Maintain groundwater quality.	High	Threat Abatement
Protect cave habitat and recharge zone from development or disturbance.	High	Habitat Protection

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## Monitoring Strategies

Monitor known occurrences using protocols developed by the Fish and Wildlife Service.

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## Comments

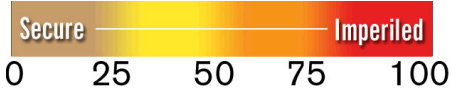
Description: a small (maximum 28mm carapace length), unpigmented troglotic crayfish with reduced eyes. (Hobbs and Brown 1987).

This crayfish is endemic to northwest Arkansas, known from very few caves, and has been listed as endangered (USFWS 1993). The species is threatened by water quality degradation, small population size, limited reproductive potential, and possible take by humans. (USFWS 1996). Recent discoveries have expanded the known distribution of this species to four sites. (Mike Slay, personal communication).

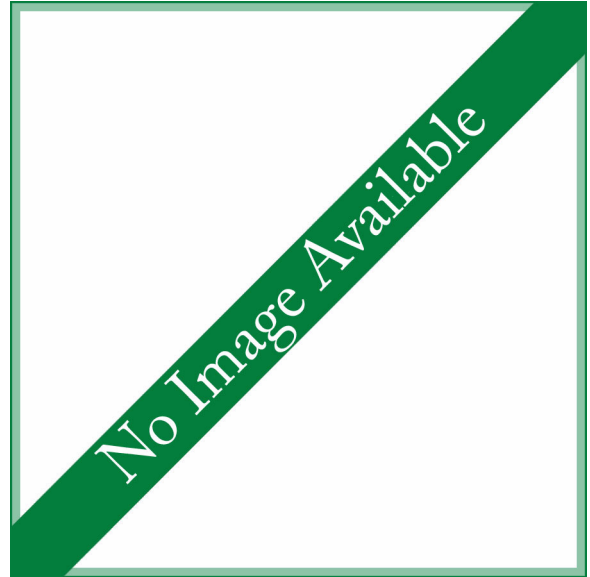
*Cambarus causeyi*  
crayfish

Class: Malacostraca  
Order: Decapoda  
Family: Cambaridae

Priority Score: **80 out of 100**



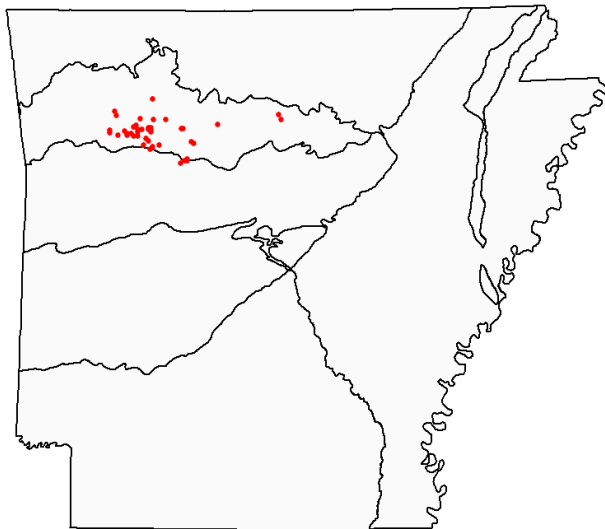
Population Trend: Unknown



G Rank: G1 – Critically imperiled species

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



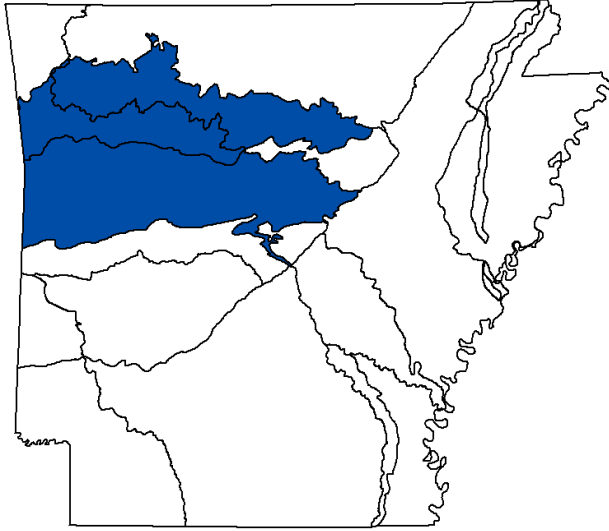
**Element Occurrence Records**

Ecoregions where the species occurs:

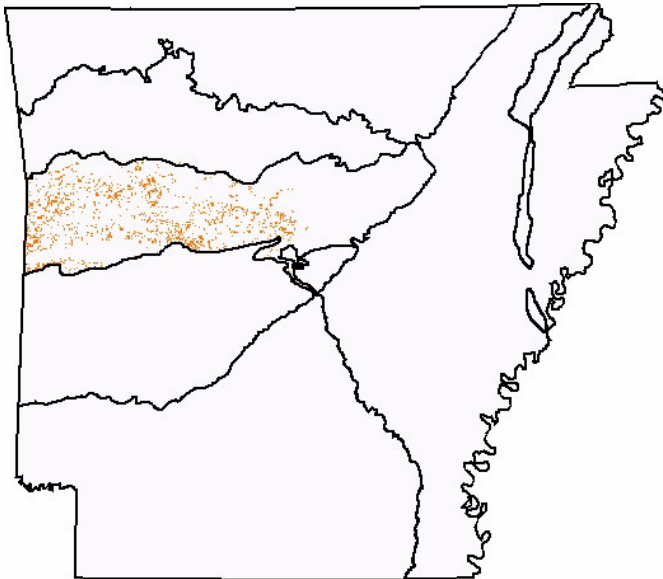
- Ozark Highlands
- Boston Mountains
- Arkansas Valley
- Ouachita Mountains
- Mississippi Valley Loess Plains
- Mississippi Alluvial Plain
- South Central Plains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Arkansas Valley - Arkansas River

Boston Mountains - Arkansas River

Boston Mountains - White River

**Terrestrial Habitats**

Ozark-Ouachita Riparian Marginal

**Aquatic Habitats**

Natural Seep: Headwater Obligate

Natural Spring Run: Headwater Suitable



## Problems Faced

Threat: Groundwater depletion  
Source: Excessive groundwater withdrawal

---

Threat: Habitat disturbance  
Source: Resource extraction

---

Threat: Riparian Habitat Destruction  
Source: Forestry activities

---

## Data Gaps/Research Needs

Survey for additional populations.

---

## Conservation Actions

	Importance	Category
	Medium	Habitat Restoration/Improvement
Maintain or, where necessary, restore water quality and stream habitat.	Medium	Habitat Protection

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Description: a strongly compressed, olive-colored crayfish that is poorly known. (Robison and Allen 1995).

This Arkansas endemic crayfish inhabits complex burrows on hillsides near springs in the Boston Mountains. (Bouchard and Robison 1980). It is most closely related to three troglobitic species. (Reimer 1966). A status and distribution study of this species has been proposed for FY06. (Brian Wagner, personal communication).

*Cambarus setosus*

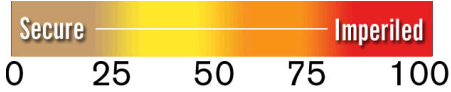
**Bristly Cave Crayfish**

**Class:** Malacostraca

**Order:** Decapoda

**Family:** Cambaridae

**Priority Score:** **27 out of 100**



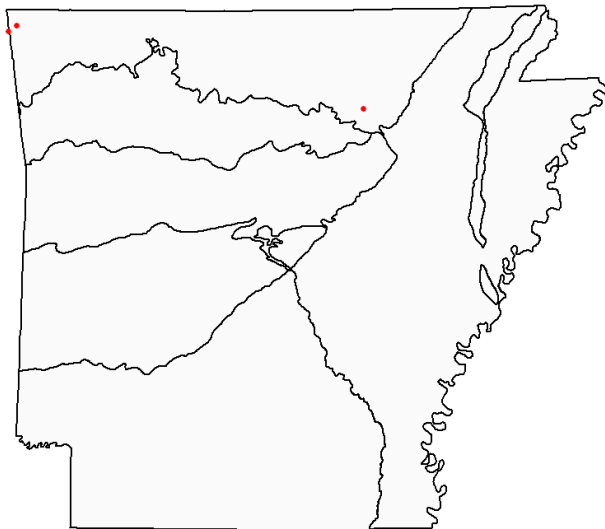
**Population Trend:** Unknown



**G Rank:** G4 – Apparently secure species

**S Rank:** S1 – Critically imperiled in Arkansas

**Distribution**



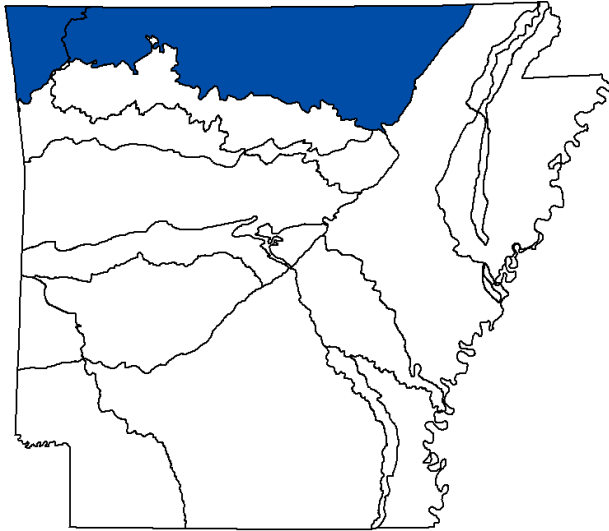
**Element Occurrence Records**

**Ecoregions where the species occurs:**

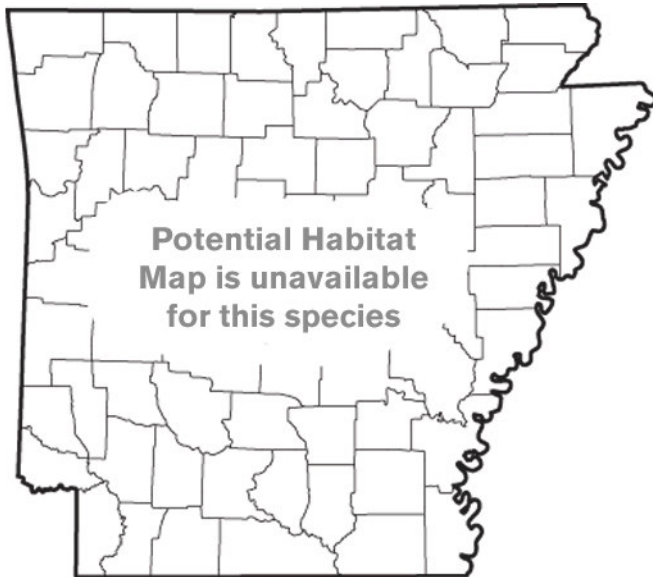
- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Ozark Highlands - Arkansas River

Ozark Highlands - White River

**Terrestrial Habitats**

Caves, Mines & Karst Habitat Obligate

**Aquatic Habitats**

Natural Cave Stream: - Small Obligate

Natural Groundwater: Obligate

## Problems Faced

Threat: Hydrological alteration  
Source: Urban development

---

Threat: Nutrient loading  
Source: Confined animal operations

---

Threat: Sedimentation  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Road construction

---

## Data Gaps/Research Needs

Conduct taxonomic analyses

---

Determine life history characteristics

---

Survey and model for additional populations.

---

## Conservation Actions

Maintain groundwater quality.

**Importance**    **Category**

Medium

Threat Abatement

---

Protect cave habitat and recharge zone from development or disturbance.

Medium

Habitat Protection

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Description: a small (maximum 4.7 inches total length), unpigmented troglobitic crayfish with reduced eyes. (Pflieger 1996).

This crayfish is endemic to caves of the Ozarks in Missouri and Oklahoma. (Hobbs 1989). Recent unpublished discoveries have found this species in Arkansas as well. (Horton H. Hobbs III, personal communication).

# *Cambarus zophonastes*

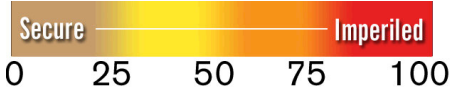
## Hell Creek Crayfish

Class: Malacostraca

Order: Decapoda

Family: Cambaridae

Priority Score: **80 out of 100**



Population Trend: Stable

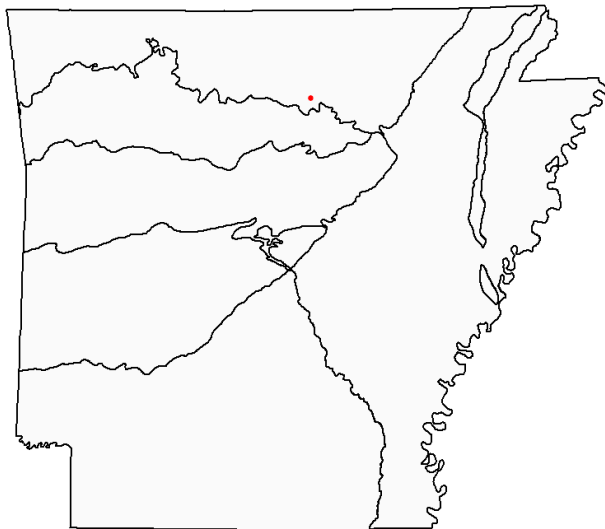


©David Kampwerth

**G Rank:** G1 – Critically imperiled species

**S Rank:** S1 – Critically imperiled in Arkansas

### Distribution



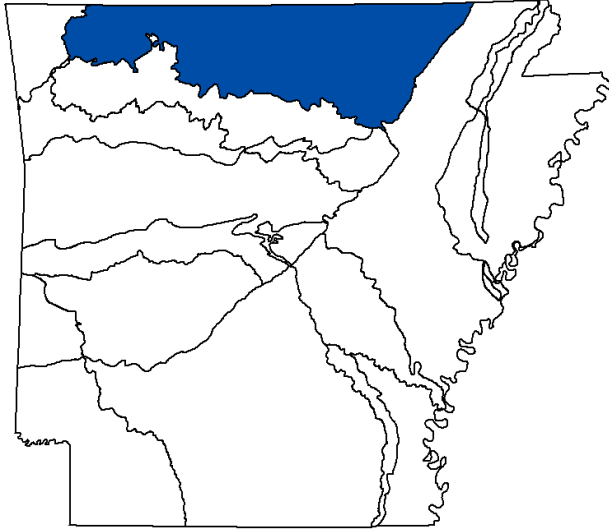
### Element Occurrence Records

### Ecoregions where the species occurs:

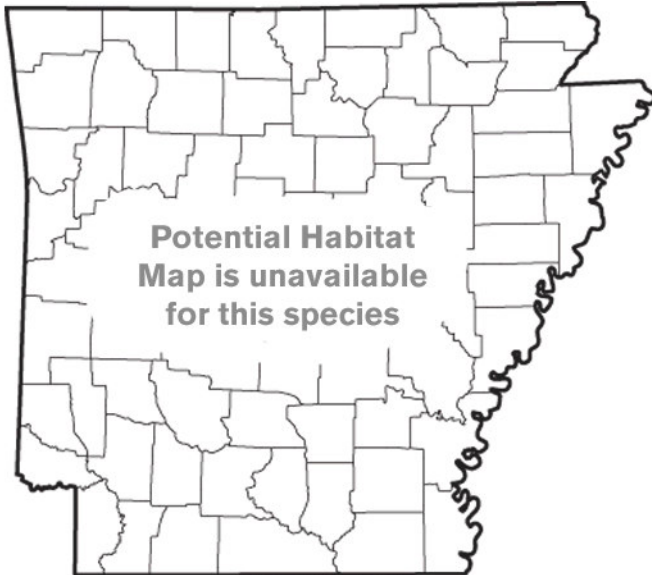
- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

### Taxa Team and reviewers

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Ozark Highlands - White River

**Terrestrial Habitats**

Caves, Mines & Karst Habitat Obligate

**Aquatic Habitats**

Natural Cave Stream: - Small - Medium Obligate

Natural Groundwater: Obligate

Natural Spring Run: - Small - Medium Marginal

**Problems Faced**

Threat: Habitat disturbance  
Source: Forestry activities

---

Threat: Habitat disturbance  
Source: Urban development

---

Threat: Sedimentation  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Road construction

---

**Data Gaps/Research Needs**

Refine delineation of recharge area and identify threats therein.

---

Survey and model for additional populations.

---

**Conservation Actions**

	<b>Importance</b>	<b>Category</b>
Maintain groundwater quality.	High	Threat Abatement
Protect cave habitat and recharge zone from development or disturbance.	Medium	Habitat Protection

---

**Monitoring Strategies**

Monitor known occurrences using protocols determined by the US Fish and Wildlife Service.

---

**Comments**

Description: an obligate cave dweller lacking pigment, with long thin appendages and reduced eyes. (Robison and Allen 1995).

An Arkansas endemic known only from a single cave in Stone county which is owned by the Arkansas Natural Heritage Commission. Protection of the cave's recharge area is the primary focus of recovery. (USFWS 1988). While populations persist at what is likely historic levels its limited distribution makes it vulnerable to impacts. (Graening and others, in progress).

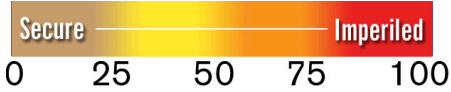
*Fallicambarus gilpini*  
crayfish

**Class:** Malacostraca

**Order:** Decapoda

**Family:** Cambaridae

**Priority Score:** **80 out of 100**



**Population Trend:** Unknown

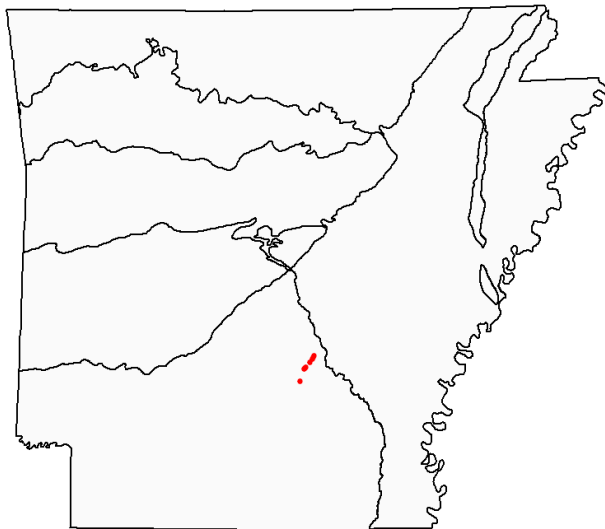


©Henry Robison

**G Rank:** G1 – Critically imperiled species

**S Rank:** S1 – Critically imperiled in Arkansas

**Distribution**



**Element Occurrence Records**

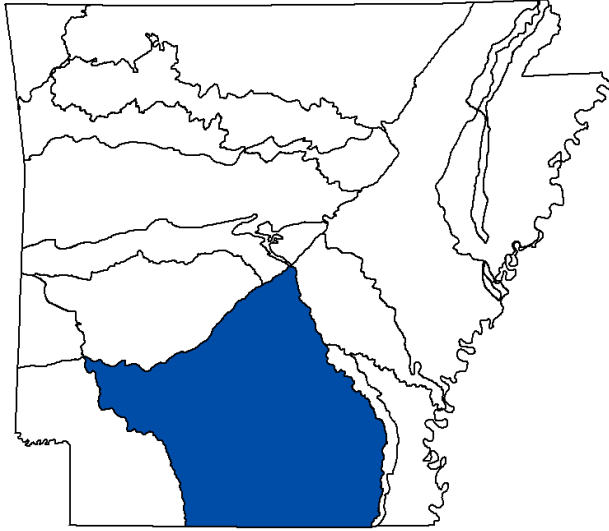
**Ecoregions where the species occurs:**

- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

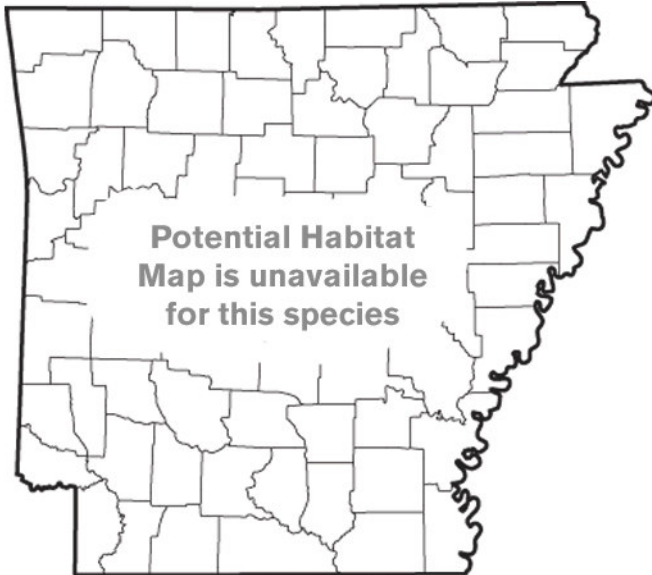
**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner





**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

South Central Plains - Ouachita River

**Terrestrial Habitats**

West Gulf Coastal Plain Seepage Swamp and Baygall      Suitable

**Aquatic Habitats**

Natural Groundwater:      Data Gap

Natural Seep: - Small      Suitable

## Problems Faced

Threat: Habitat disturbance  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Road construction

---

## Data Gaps/Research Needs

Determine habitat requirements.

---

Survey for additional populations.

---

## Conservation Actions

	Importance	Category
	Medium	Threat Abatement
Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Description: a burrowing crayfish often blueish in color. (Hobbs and Robison 1989).

This Arkansas endemic crayfish is restricted to a small area southwest of Pine Bluff, Arkansas. It has been documented from six sites in Jefferson County and one site in Cleveland County. (Robison and Wagner, in press). It prefers to burrow on seepage slopes away from standing water areas.

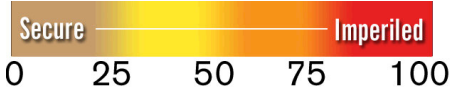
*Fallicambarus harpi*  
crayfish

Class: Malacostraca

Order: Decapoda

Family: Cambaridae

Priority Score: **80 out of 100**



Population Trend: Unknown

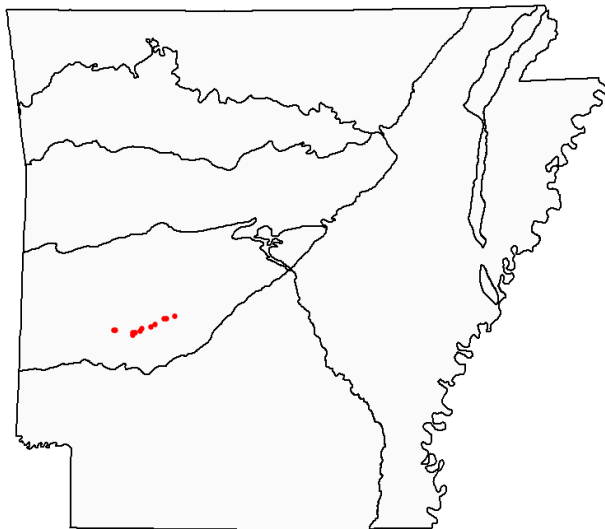


©Brian Wagner

G Rank: G1 – Critically imperiled species

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



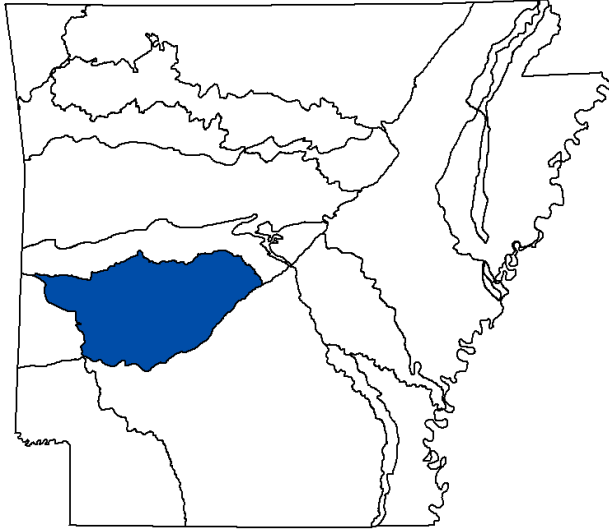
**Element Occurrence Records**

Ecoregions where the species occurs:

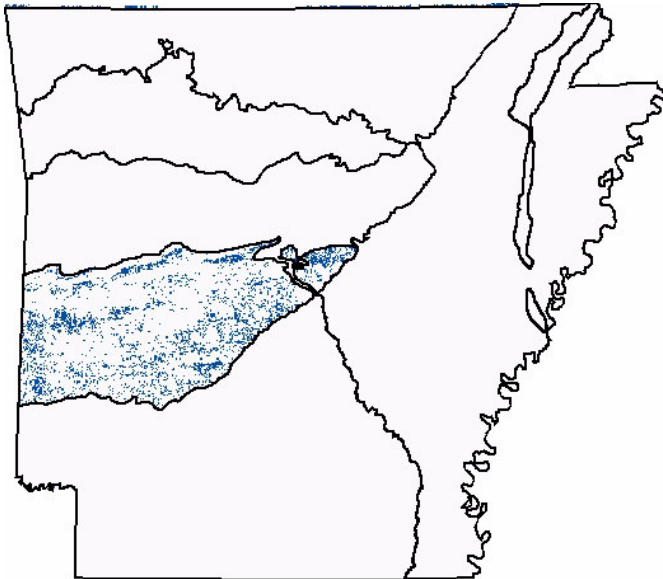
- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Ouachita Mountains - Ouachita River

**Terrestrial Habitats**

Ouachita Mountain Forested Seep	Optimal
Ouachita Mountain Forested Seep	Suitable
Pasture Land	Suitable

**Aquatic Habitats**

Natural Groundwater:	Data Gap
Natural Seep: - Small	Suitable

## Problems Faced

Threat: Habitat disturbance  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Road construction

---

## Data Gaps/Research Needs

Survey for additional populations.

---

## Conservation Actions

	Importance	Category
	Medium	Threat Abatement
Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Description: a burrowing crayfish, tan in color with highly variable patterning (Hobbs and Robison 1985).

This crayfish is endemic to the southern Ouachitas and is known from 12 sites in Garland, Hot Spring, Montgomery, and Pike counties (Robison and Crump 2004).

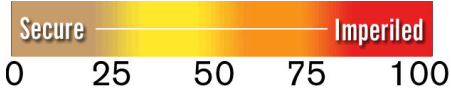
*Fallicambarus jeanae*  
crayfish

Class: Malacostraca

Order: Decapoda

Family: Cambaridae

Priority Score: **46 out of 100**



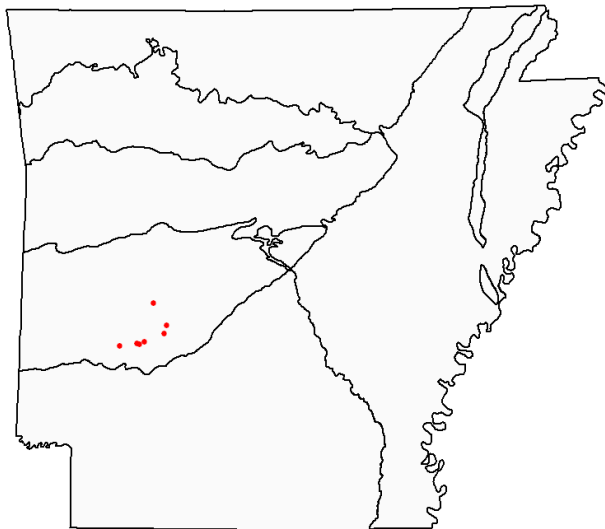
Population Trend: Unknown



G Rank: G2 – Imperiled species

S Rank: S2 – Imperiled in Arkansas

**Distribution**



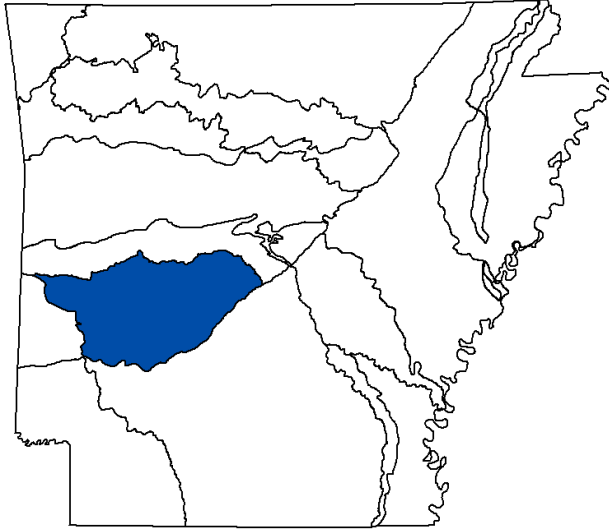
**Element Occurrence Records**

Ecoregions where the species occurs:

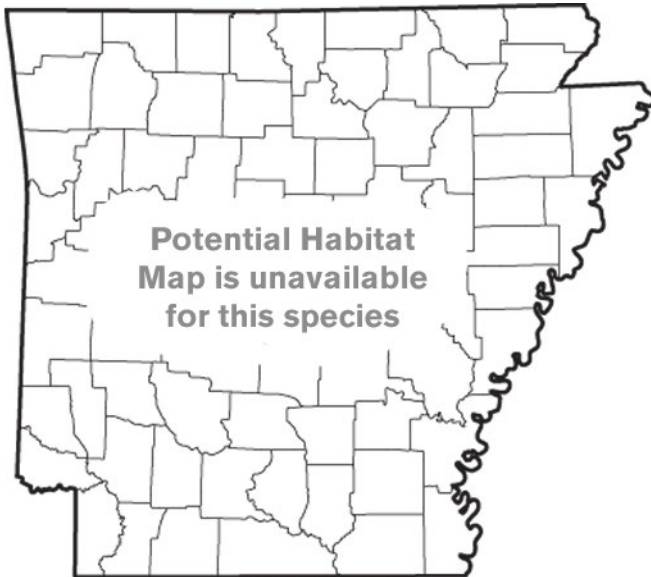
- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Ouachita Mountains - Ouachita River

**Terrestrial Habitats**

Ouachita Mountain Forested Seep Optimal

**Aquatic Habitats**

Natural Groundwater: - Small Data Gap

Natural Seep: - Small Optimal

## Problems Faced

Threat: Habitat disturbance  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Road construction

---

## Data Gaps/Research Needs

Survey for additional populations.

---

## Conservation Actions

	Importance	Category
	Medium	Threat Abatement
Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Description: a burrowing crayfish varying in color from tan to grey (Hobbs 1973, Robison and Allen 1995).

This endemic crayfish inhabits burrows in sandy clay soils in Hemptead, Pike, Clark and Hot Spring counties (Robison and Allen 1995).



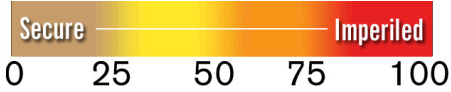
*Fallicambarus petilicarpus*  
crayfish

Class: Malacostraca

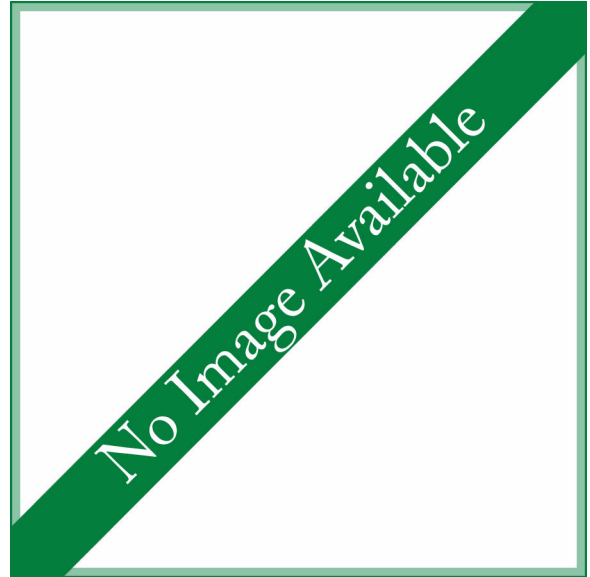
Order: Decapoda

Family: Cambaridae

Priority Score: **80 out of 100**



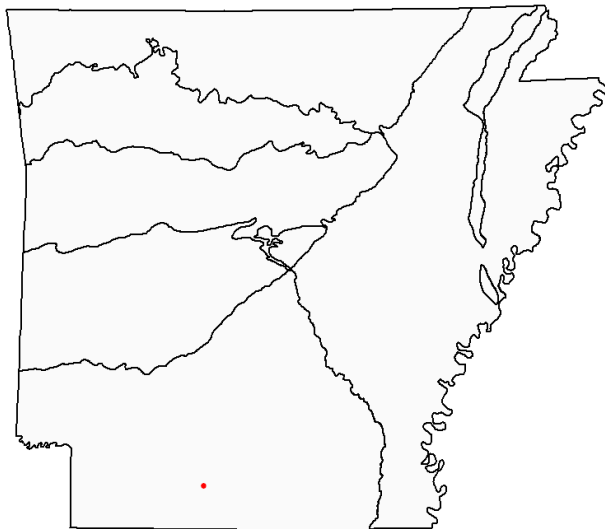
Population Trend: Unknown



G Rank: G1 – Critically imperiled species

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



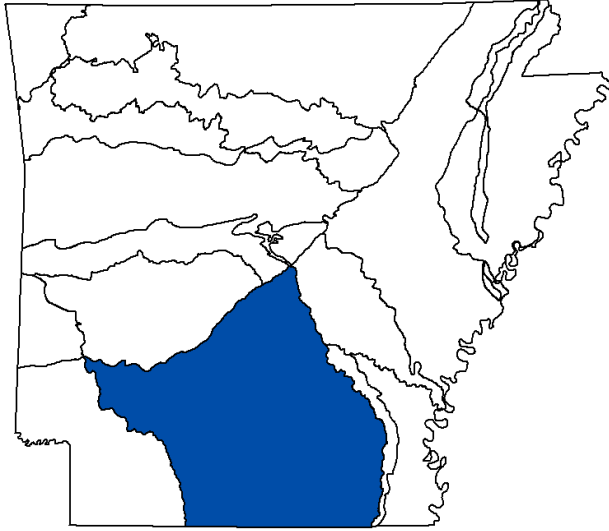
**Element Occurrence Records**

Ecoregions where the species occurs:

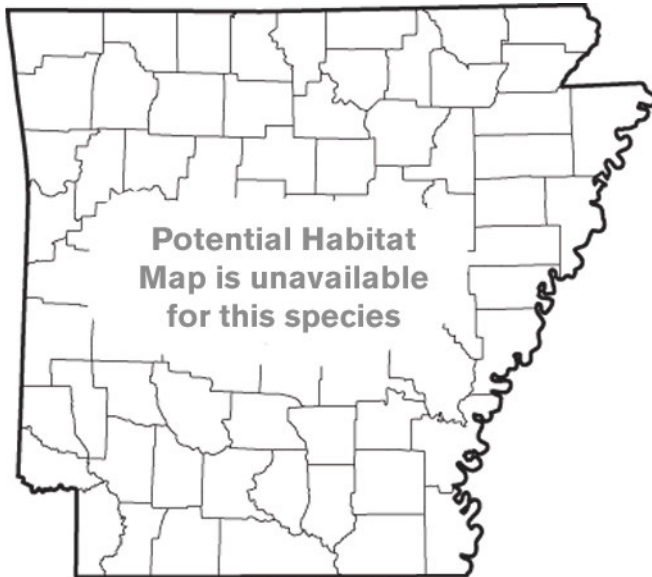
- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

South Central Plains - Ouachita River

**Terrestrial Habitats**

West Gulf Coastal Plain Seepage Swamp and Baygall      Data Gap

**Aquatic Habitats**

Natural Groundwater:      Data Gap

Natural Seep: - Small      Suitable

## Problems Faced

Threat: Habitat disturbance  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Road construction

---

## Data Gaps/Research Needs

Survey for additional populations.

---

## Conservation Actions

	Importance	Category
	Medium	Threat Abatement
Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection

---

## Monitoring Strategies

Determine habitat requirements.

---

Monitor known occurrences.

---

## Comments

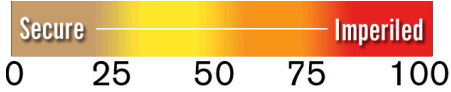
Description: a burrowing crayfish, olive-brown and tan in color (Hobbs and Robison 1989).

This endemic crayfish has been documented from 5 locations in Union and Columbia counties (Robison 2001).

*Fallicambarus strawni*  
crayfish

Class: Malacostraca  
Order: Decapoda  
Family: Cambaridae

Priority Score: **65 out of 100**



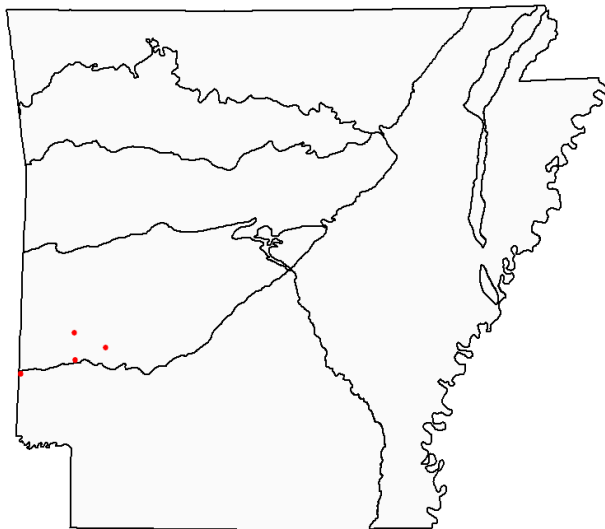
Population Trend: Unknown



G Rank: G1G2 – Critically imperiled (uncertain rank)

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



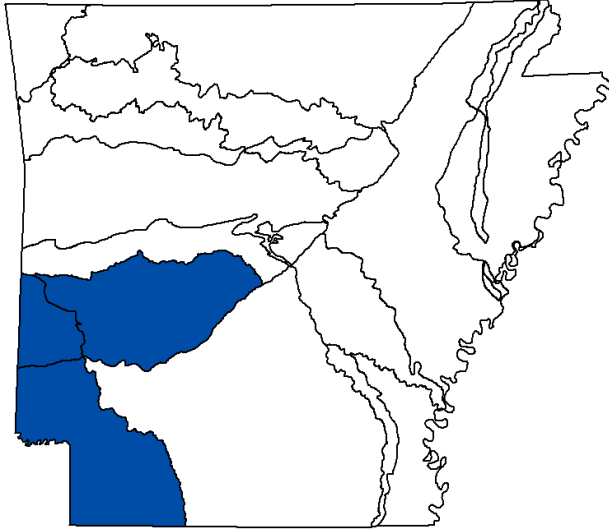
**Element Occurrence Records**

Ecoregions where the species occurs:

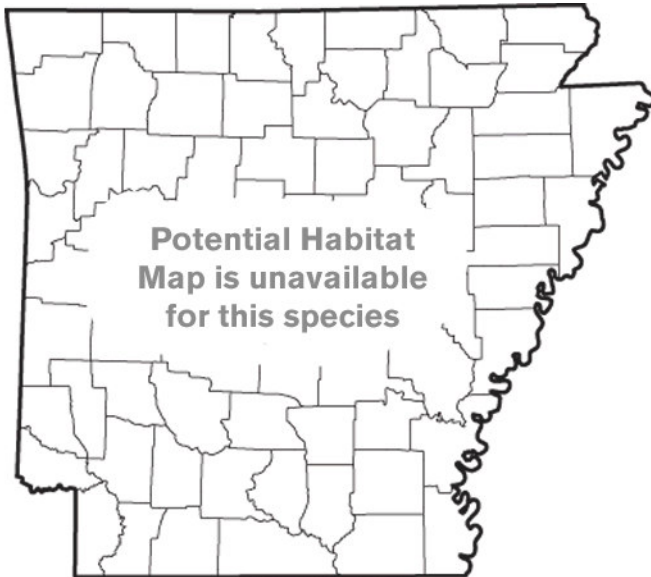
- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Ouachita Mountains - Ouachita River

Ouachita Mountains - Red River

South Central Plains - Red River

**Terrestrial Habitats**

Ouachita Mountain Forested Seep Data Gap

Ouachita Mountain Forested Seep Suitable

**Aquatic Habitats**

Natural Groundwater: Data Gap

Natural Seep: Headwater - Small Suitable

## Problems Faced

Threat: Habitat destruction or conversion  
Source: Road construction

---

Threat: Habitat disturbance  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Management of/for certain species

---

## Data Gaps/Research Needs

Survey for additional populations.

---

## Conservation Actions

	Importance	Category
--	------------	----------

Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection
--	--------	--------------------

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Description: a pinkish cream to purplish tan crayfish that was originally described by Riemer (1966).

This endemic crayfish is known from Pike and Howard counties, where it burrows in marshy areas with sandy clay (Robison and Allen 1995).

*Faxonella blairi*

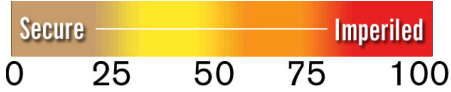
crayfish

Class: Malacostraca

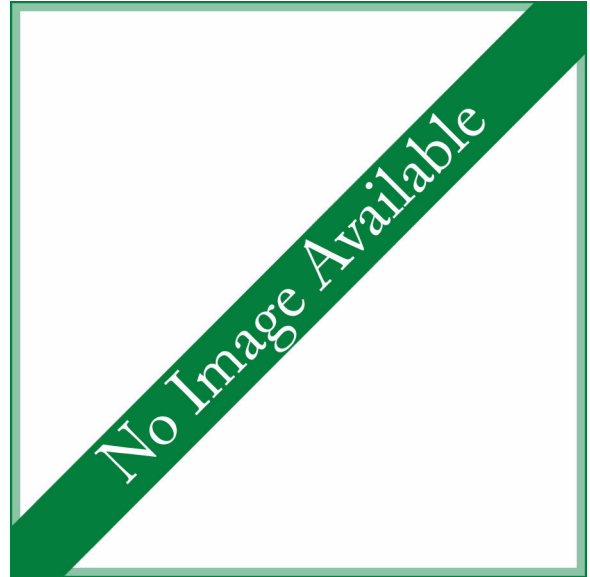
Order: Decapoda

Family: Cambaridae

Priority Score: **50 out of 100**



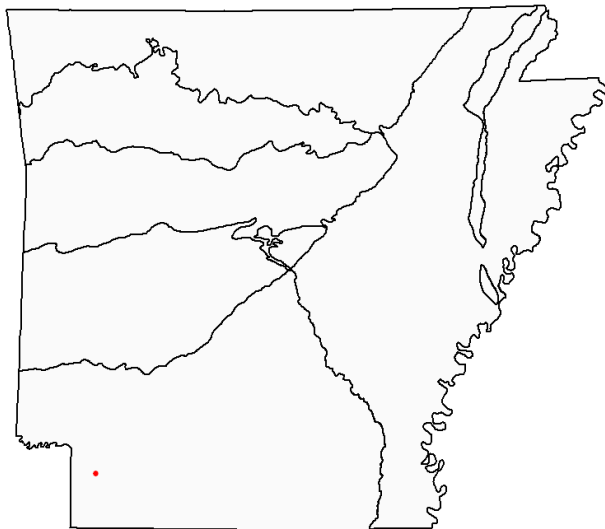
Population Trend: Unknown



G Rank: G2 – Imperiled species

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



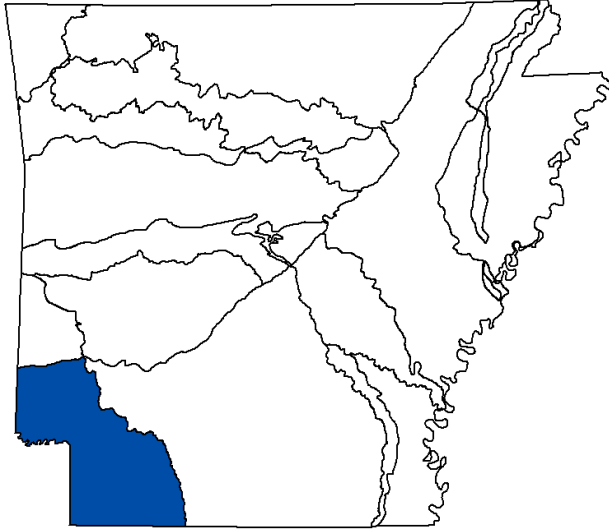
**Element Occurrence Records**

Ecoregions where the species occurs:

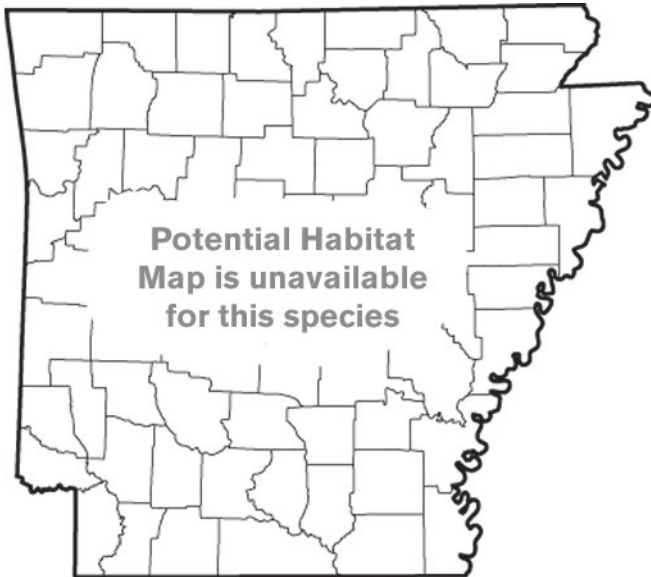
- Ozark Highlands
- Boston Mountains
- Arkansas Valley
- Ouachita Mountains
- Mississippi Valley Loess Plains
- Mississippi Alluvial Plain
- South Central Plains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

South Central Plains - Red River

**Terrestrial Habitats**

West Gulf Coastal Plain Seepage Swamp and Baygall      Data Gap

**Aquatic Habitats**

Natural Swamp/Wetlands:      Data Gap



**Problems Faced**

Threat: Habitat destruction  
Source: Road construction

---

Threat: Habitat disturbance  
Source: Forestry activities

---

Threat: Hydrological alteration  
Source: Urban development

---

Threat: Toxins/contaminants  
Source: Road construction

---

**Data Gaps/Research Needs**

Survey for additional populations.

---

**Conservation Actions**

**Importance    Category**

Protect known occurrences from construction activities, herbicide applications and timber harvesting.	Medium	Habitat Protection
---	--------	--------------------

---

**Monitoring Strategies**

Monitor known occurrences.

---

**Comments**

Description: a small, wetland crayfish with maximum carapace length of 20mm (Hayes and Riemer 1977).

Occurs in southwest Arkansas and southeast Oklahoma (Hayes and Riemer 1977).

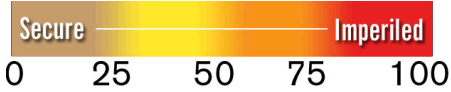
*Procambarus ferrugineus*  
crayfish

Class: Malacostraca

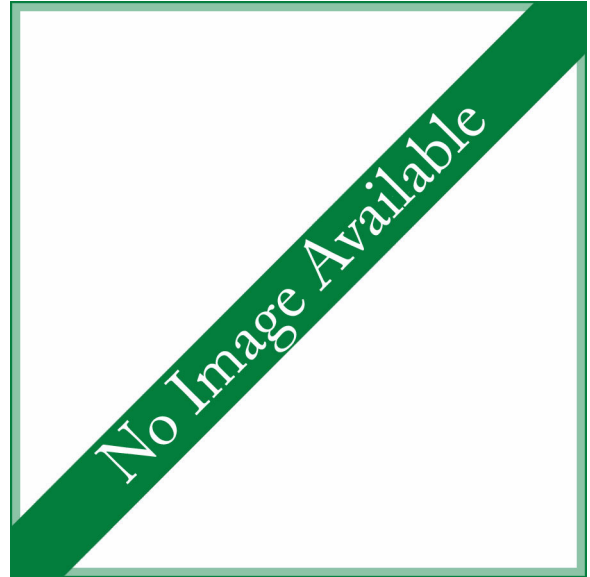
Order: Decapoda

Family: Cambaridae

Priority Score: **100** out of 100



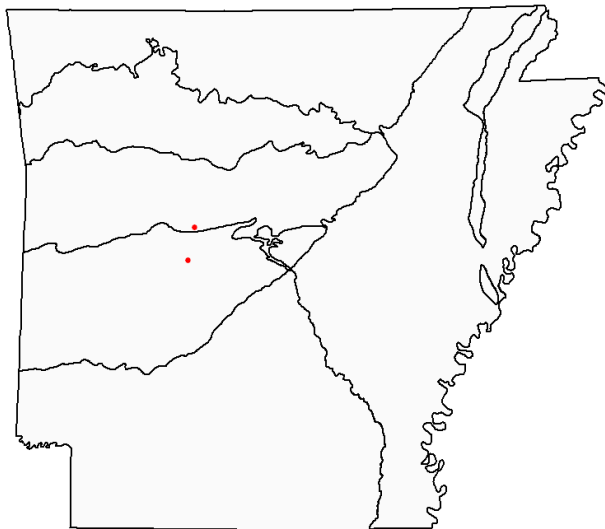
Population Trend: Decreasing



G Rank: G1 – Critically imperiled species

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



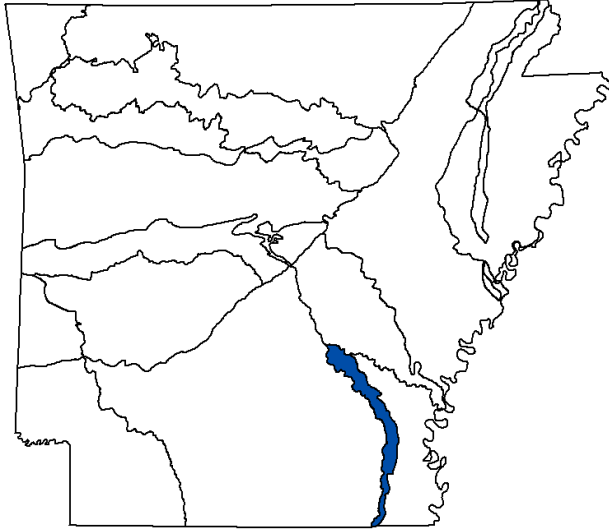
**Element Occurrence Records**

Ecoregions where the species occurs:

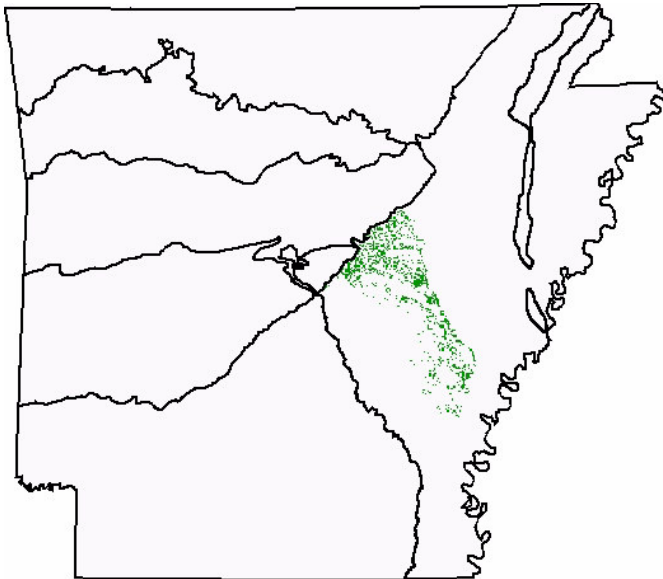
- Ozark Highlands
- Boston Mountains
- Arkansas Valley
- Ouachita Mountains
- Mississippi Valley Loess Plains
- Mississippi Alluvial Plain
- South Central Plains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Mississippi River Alluvial Plain - Arkansas River

Ouachita Mountains - Arkansas River

**Terrestrial Habitats**

Lower Mississippi Alluvial Plain Grand Prairie                      Obligate

**Aquatic Habitats**

Natural Groundwater: - Medium    Obligate

## Problems Faced

Threat: Groundwater depletion  
Source: Crop production practices

---

Threat: Habitat destruction  
Source: Crop production practices

---

Threat: Habitat destruction  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Crop production practices

---

## Data Gaps/Research Needs

Survey for additional populations.

---

## Conservation Actions

	Importance	Category
	Medium	Habitat Restoration/Improvement
Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Described from two nearby localities in Lonoke county (Robison and Allen 1995). A study is nearing completion looking at its status and genetics (Robison and Crandall, in preparation).

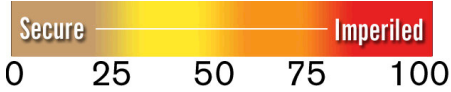
*Procambarus parasimulans*  
crayfish

Class: Malacostraca

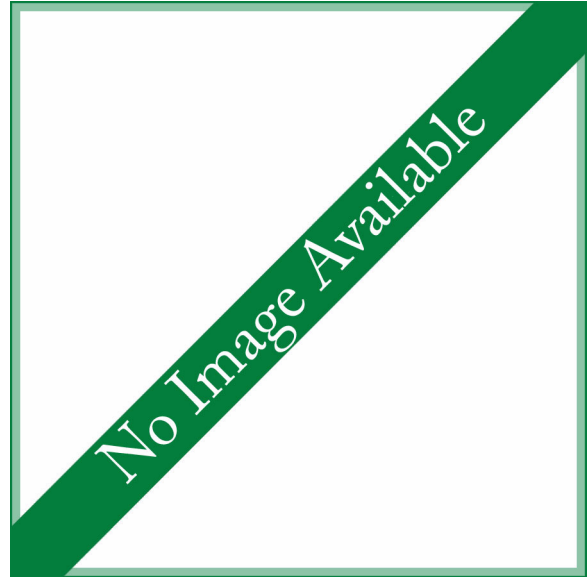
Order: Decapoda

Family: Cambaridae

Priority Score: **23 out of 100**



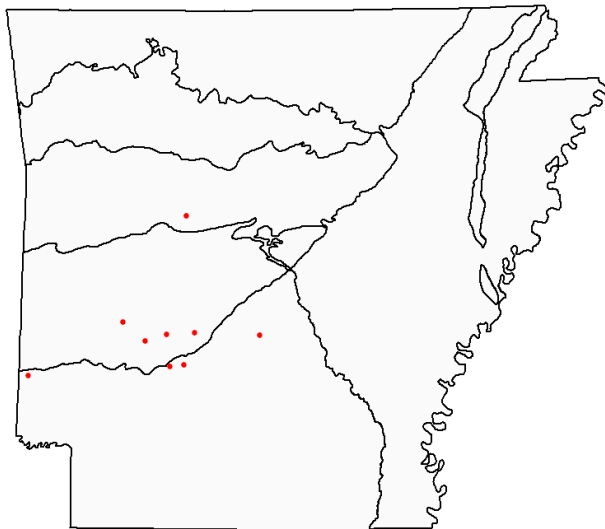
Population Trend: Unknown



G Rank: G4 – Apparently secure species

S Rank: S2 – Imperiled in Arkansas

**Distribution**



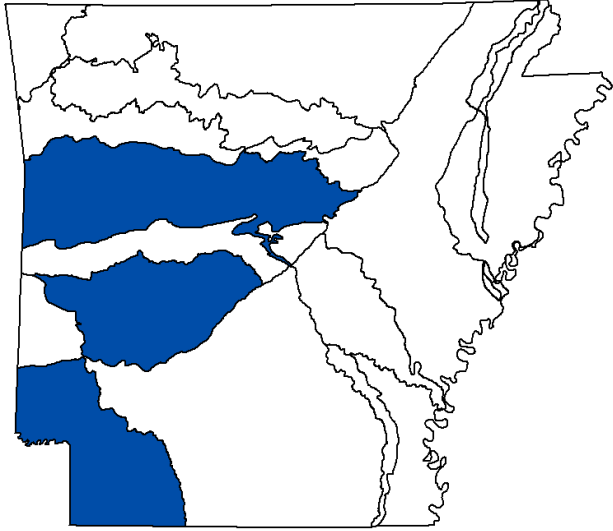
**Element Occurrence Records**

Ecoregions where the species occurs:

- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner



**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Arkansas Valley - Arkansas River

Ouachita Mountains - Ouachita River

South Central Plains - Red River

**Aquatic Habitats**

Natural Groundwater: - Small Suitable

Natural Pool: - Small Data Gap

Natural Riffle: - Small Data Gap

## Problems Faced

Threat: Groundwater depletion  
Source: Excessive groundwater withdrawal

---

Threat: Habitat destruction  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Crop production practices

---

## Data Gaps/Research Needs

Determine habitat requirements and threats

---

Survey for additional populations.

---

## Conservation Actions

	Importance	Category
--	------------	----------

Protect known occurrences from construction activities and herbicide applications	Medium	Habitat Protection
---	--------	--------------------

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Description: a tan crayfish, 30 to 40mm in carapace length (Hobbs and Robison 1982).

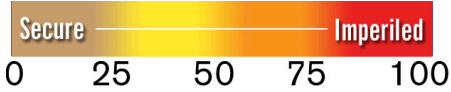
*Procambarus regalis*  
crayfish

Class: Malacostraca

Order: Decapoda

Family: Cambaridae

Priority Score: **36 out of 100**



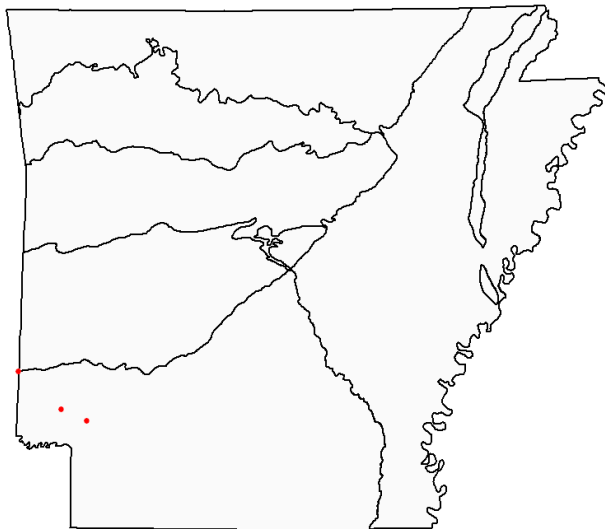
Population Trend: Unknown



G Rank: G2G3 – Imperiled (uncertain rank)

S Rank: S2S3 – Imperiled species in Arkansas (uncertain rank)

**Distribution**



**Element Occurrence Records**

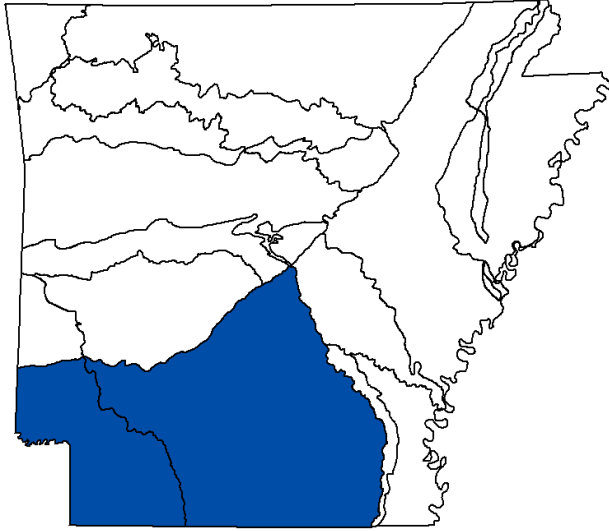
Ecoregions where the species occurs:

- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

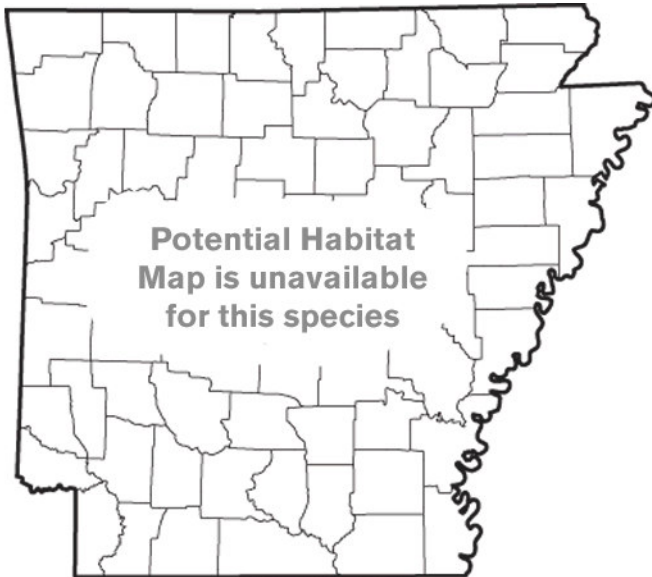
**Taxa Team and reviewers**

AGFC Mr. Brian Wagner, ANHC Mr. Michael Warriner





**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

South Central Plains - Red River

**Terrestrial Habitats**

West Gulf Coastal Plain Seepage Swamp and Baygall      Suitable

**Aquatic Habitats**

Natural Groundwater:      Data Gap

Natural Seep: Headwater - Small      Suitable

## Problems Faced

Threat: Chemical alteration  
Source: Road construction

---

Threat: Habitat destruction or conversion  
Source: Road construction

---

## Data Gaps/Research Needs

Assess sensitivity to environmental stresses.

---

Conduct distribution surveys and life history studies.

---

## Conservation Actions

	Importance	Category
--	------------	----------

Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection
--	--------	--------------------

---

## Monitoring Strategies

Monitor known occurrences.

---

## Comments

Description: a medium-sized brownish red and orange burrowing crayfish (Robison and Allen 1995).

Inhabits simple burrows in colonies that may be extremely large, in southwestern Arkansas (Hobbs and Robison 1988).

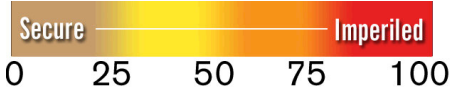
*Procambarus reimeri*  
crayfish

Class: Malacostraca

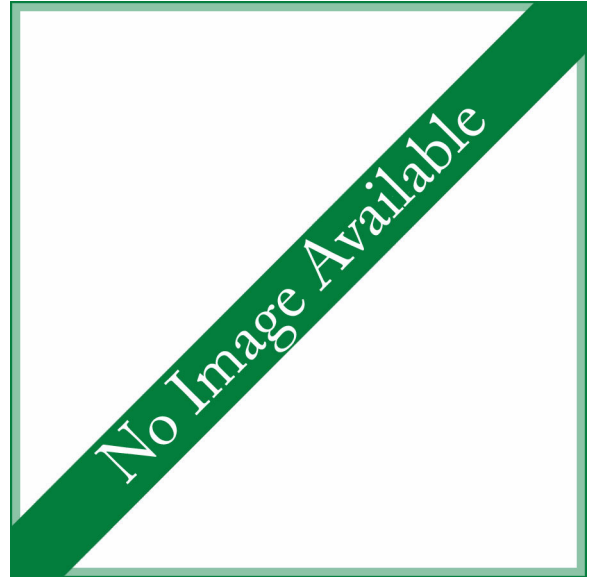
Order: Decapoda

Family: Cambaridae

Priority Score: **80 out of 100**



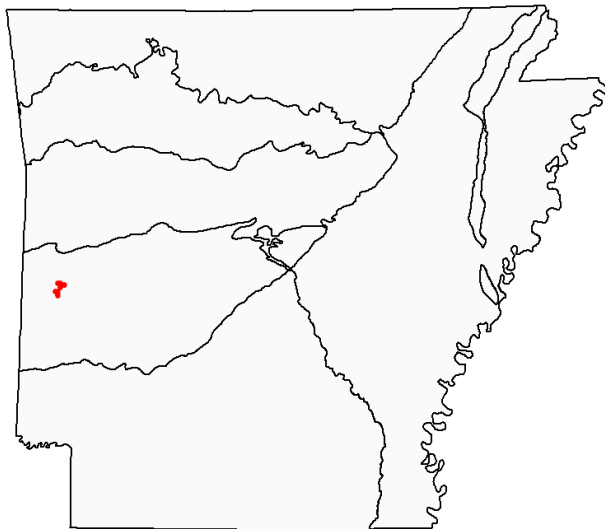
Population Trend: Unknown



G Rank: G1 – Critically imperiled species

S Rank: S1 – Critically imperiled in Arkansas

**Distribution**



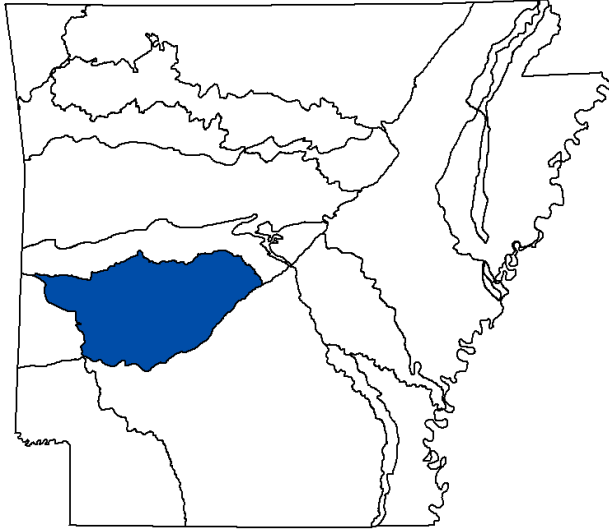
**Element Occurrence Records**

Ecoregions where the species occurs:

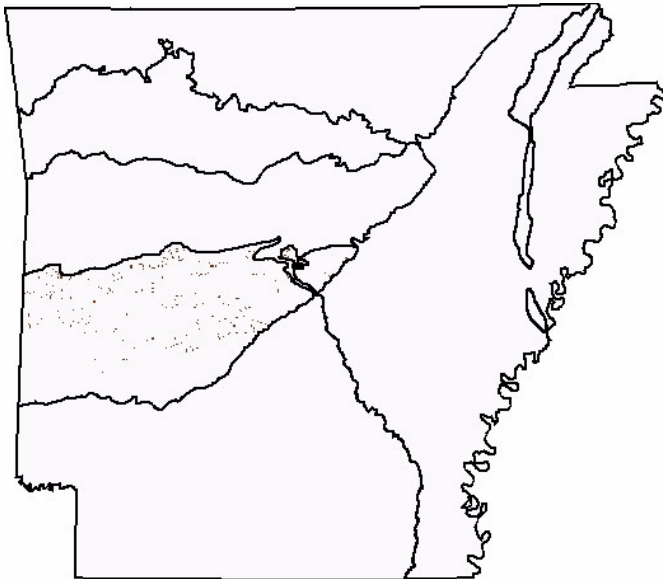
- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

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**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Ouachita Mountains - Ouachita River

**Terrestrial Habitats**

Ouachita Mountain Forested Seep Data Gap

Ozark-Ouachita Riparian Data Gap

**Aquatic Habitats**

Natural Groundwater: Data Gap

Natural Seep: Headwater - Small Suitable

**Problems Faced**

Threat: Habitat destruction or conversion  
Source: Forestry activities

---

Threat: Habitat destruction  
Source: Road construction

---

Threat: Toxins/contaminants  
Source: Forestry activities

---

**Data Gaps/Research Needs**

Identify habitat requirements and threats.

---

Survey for additional populations.

---

**Conservation Actions**

**Importance**    **Category**

Medium    Threat Abatement

---

Protect known occurrences from construction activities and herbicide applications.    Medium    Habitat Protection

---

**Monitoring Strategies**

Monitor known occurrences.

---

**Comments**

Description: a pinkish cream-colored burrowing crayfish (Robison and Allen 1995).

Known from six localities in the Ouachita River basin of Polk county (Hobbs and Robison 1988).

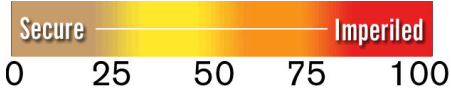
*Procambarus tenuis*  
crayfish

Class: Malacostraca

Order: Decapoda

Family: Cambaridae

Priority Score: **31 out of 100**



Population Trend: Unknown

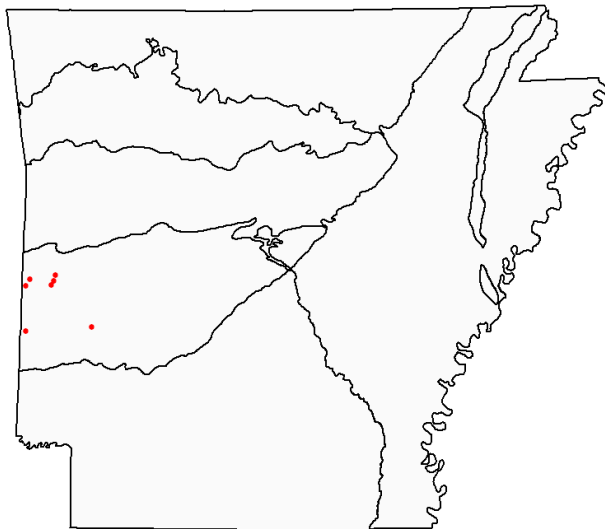


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G Rank: G3 – Vulnerable species

S Rank: S2 – Imperiled in Arkansas

**Distribution**



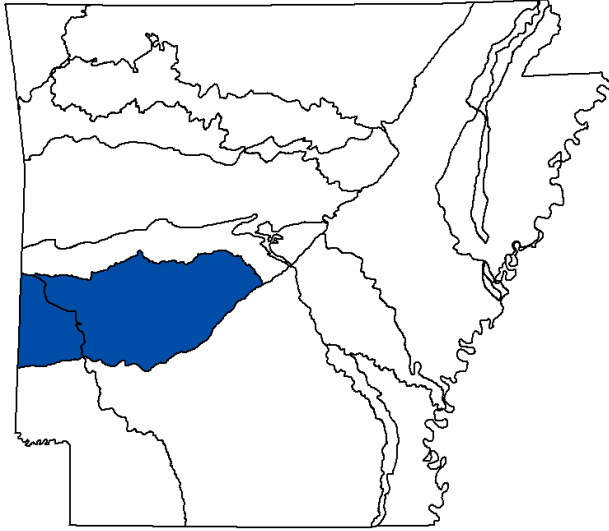
**Element Occurrence Records**

Ecoregions where the species occurs:

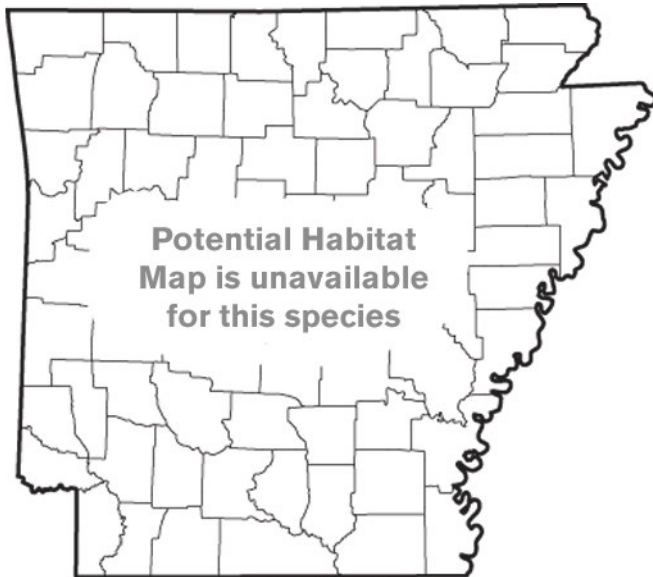
- Ozark Highlands
- Mississippi Valley Loess Plains
- Boston Mountains
- Mississippi Alluvial Plain
- Arkansas Valley
- South Central Plains
- Ouachita Mountains

**Taxa Team and reviewers**

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**Ecobasins where this species occurs**



**Potential Terrestrial Habitat**



**Ecobasins**

Ouachita Mountains - Arkansas River

Ouachita Mountains - Ouachita River

Ouachita Mountains - Red River

**Terrestrial Habitats**

Ouachita Mountain Forested Seep

Data Gap

**Aquatic Habitats**

Natural Groundwater:	Data Gap
Natural Pool:	Data Gap
Natural Riffle:	Data Gap
Natural Run:	Data Gap
Natural Seep:	Data Gap

**Problems Faced**

Threat: Habitat destruction Source: Resource extraction
Threat: Habitat disturbance Source: Road construction
Threat: Riparian Habitat Destruction Source: Forestry activities
Threat: Toxins/contaminants Source: Forestry activities

**Data Gaps/Research Needs**

Survey for additional populations.

**Conservation Actions**

	<b>Importance</b>	<b>Category</b>
Protect known occurrences from construction activities and herbicide applications.	Medium	Habitat Protection

**Monitoring Strategies**

Monitor known occurrences.

**Comments**

Occurs in and adjacent to springs and clear cool streams in the Ouachitas of extreme western Arkansas and eastern Oklahoma (Hobbs 1989).