

MBSS Crayfish Sampling Protocols



Current Status of Maryland Crayfishes



Genus	Species	Common Name	State Rank
<i>Procambarus</i>	<i>acutus</i>	White River Crawfish	Secure
<i>Orconectes</i>	<i>limosus</i>	Spinycheek Crayfish	Secure
	<i>obscurus</i>	Allegheny Crayfish	Secure
<i>Cambarus</i>	<i>acuminatus</i>	Acuminate Crayfish	State Rare *
	<i>bartonii</i>	Common Crayfish	Secure
	<i>carinirostris</i>	Rock Crawfish	Secure
	<i>diogenes</i>	Devil Crayfish	Secure
	<i>dubius</i>	Upland Burrowing Crayfish	Secure
<i>Fallicambarus</i>	<i>fodiens</i>	Digger Crayfish	Secure

* In Need of Conservation



Non-native Crayfishes in Maryland

Genus	Species	Common Name
<i>Procambarus</i>	<i>clarkii</i>	Red Swamp Crawfish ★
	<i>zonangulus</i>	Southern White River Crawfish
<i>Orconectes</i>	<i>rusticus</i>	Rusty Crayfish ★
	<i>virilis</i>	Virile Crayfish ★
<i>Cambarus</i>	<i>thomasi</i>	Little Brown Mudbug

★ Invasive, problematic species



Crayfish Sampling:

- Conducted concurrently with MBSS fish and salamander sampling

Crayfish Sampling:

- Each 75m site is “closed” using block nets placed at the 0m and 75m locations



Crayfish Sampling:

- Collected using two- pass electrofishing
 - Conducted in an upstream direction
 - 1 electroshocker per 3 meters of stream width



Crayfish Sampling:

- Capture all crayfishes encountered



Crayfish Sampling:

- Overturn rocks and disturb substrate to increase capture



Crayfish Sampling:

- Place crayfish in buckets and live wells during each electrofishing pass



Crayfish Sampling:

- Check downstream block net for crayfish following each pass



Crayfish Sampling:



- Identify and count all crayfishes $>15\text{mm}$ (carapace length)





Crayfish Processing:

- Record full scientific (latin) name of each species and number collected per pass

<input type="checkbox"/> None Observed	CRAYFISHES	Number Retained?	1st Pass Catch (Total)	2nd Pass Catch (Total)
	Cambarus bartonii		45	17

Crayfish Burrows
(Absent, Present, Extensive)

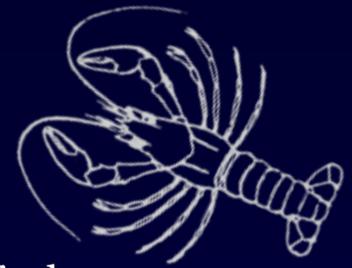
Crayfish Processing:



- Retain (or release far downstream) all crayfishes collected during first pass until completion of the second pass



Crayfish Vouchering:



- All specimens that can not be positively identified
- All specimens of *Procambarus acutus/zonangulus*
- Form I males (preferred)
- Each MBSS crew vouchers five specimens/species



*** Use 70% ethanol
to preserve crayfish
specimens**



**Any
Questions?**