

Supplementary Table S1. *Cryptobranchus* and *Andrias* individuals examined.

INDIVIDUAL	TAXON	ORIGIN ^A	SEX	TAXON SET ^B
C31AM	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Male	1
C32AM	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Male	1
C33AM	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Male	1
C34AM	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Male	1
C35AM	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Male	1
C36AM	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Male	1,2,3
C38AF	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Female	1,2
C39AF	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Female	1,3
C89CM	<i>Cryptobranchus alleganiensis bishopi</i>	Eleven Point River, MO	Male	1
C91CF	<i>Cryptobranchus alleganiensis bishopi</i>	Eleven Point River, MO	Female	1
C92DF	<i>Cryptobranchus alleganiensis bishopi</i>	Eleven Point River, AR	Female	1,3
C93DF	<i>Cryptobranchus alleganiensis bishopi</i>	Eleven Point River, AR	Female	1
C94DM	<i>Cryptobranchus alleganiensis bishopi</i>	Eleven Point River, AR	Male	1
C97DM	<i>Cryptobranchus alleganiensis bishopi</i>	Eleven Point River, AR	Male	1
C100EF	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Female	1
C101EM	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Male	1
C104EF	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Female	1
C108EM	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Male	1
C109EF	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Female	1
C110EF	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Female	1
C37AF	<i>Cryptobranchus alleganiensis bishopi</i>	White River, MO	Female	3
C52BM	<i>Cryptobranchus alleganiensis alleganiensis</i>	Blue River, IN	Male	3
C57BF	<i>Cryptobranchus alleganiensis alleganiensis</i>	Blue River, IN	Female	3
C90CM	<i>Cryptobranchus alleganiensis bishopi</i>	Eleven Point River, MO	Male	3
C106EM	<i>Cryptobranchus alleganiensis alleganiensis</i>	White River, MO	Male	3
C120GU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Gasconade River, MO	Male	4
C121GU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Gasconade River, MO	Male	4
C122GU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Gasconade River, MO	Male	4
C123HU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Meramec River, MO	Male	4
C124HU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Meramec River, MO	Male	4
C125HU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Meramec River, MO	Male	4
C126HU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Meramec River, MO	Female	4
C127HU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Meramec River, MO	Female	4
C128HU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Meramec River, MO	Male	4

C131IU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Big Piney River, MO	Female	4
C132IU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Big Piney River, MO	Female	4
C133IU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Big Piney River, MO	Female	4
C136JU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Niangua River, MO	Male	4
C137JU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Niangua River, MO	Male	4
C138JU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Niangua River, MO	Male	4
C139JU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Niangua River, MO	Female	4
C140JU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Niangua River, MO	Female	4
C143KU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Current River, MO	Female	4
C144KU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Current River, MO	Female	4
C145KU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Current River, MO	Male	4
C146KU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Current River, MO	Female	4
C147KU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Current River, MO	Female	4
C148KU	<i>Cryptobranchus alleganiensis alleganiensis</i>	Current River, MO	Female	4
NT1	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Male	5
NT2	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Male	5
NT3	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Male	5
7678	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7679	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7686	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7687	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Male	5
7689	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Male	5
7692	<i>Cryptobranchus alleganiensis alleganiensis</i>	Green River, KY	Male	5
7698	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7718	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Male	5
7720	<i>Cryptobranchus alleganiensis alleganiensis</i>	Kinniconick Creek, KY	Male	5
7724	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7732	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7733	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7742	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7761	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Female	5
7771	<i>Cryptobranchus alleganiensis alleganiensis</i>	Licking River, KY	Male	5
AD01M	<i>Andrias davidianus</i>	Saint Louis Zoo	Male	3
AD02F	<i>Andrias davidianus</i>	Saint Louis Zoo	Female	6
AD03F	<i>Andrias davidianus</i>	Saint Louis Zoo	Female	3
AD04M	<i>Andrias davidianus</i>	California Academy of Sciences	Male	6

AD05M	<i>Andrias davidianus</i>	California Academy of Sciences	Male	6
AD06M	<i>Andrias davidianus</i>	California Academy of Sciences	Male	6
AJ01F	<i>Andrias japonicus</i>	Detroit Zoo	Male	6
AJ02F	<i>Andrias japonicus</i>	Detroit Zoo	Male	6
AJ03M	<i>Andrias japonicus</i>	Detroit Zoo	Male	6
AJ04M	<i>Andrias japonicus</i>	Detroit Zoo	Male	6
AJ13F	<i>Andrias japonicus</i>	National Zoo	Female	6
AJ14M	<i>Andrias japonicus</i>	National Zoo	Male	6
AJ15F	<i>Andrias japonicus</i>	National Zoo	Female	6
AJ16F	<i>Andrias japonicus</i>	National Zoo	Female	6
AJ17M	<i>Andrias japonicus</i>	National Zoo	Male	6

^a AR: Arkansas, IN: Indiana, KY: Kentucky, MO: Missouri

^b 1: individual used for ddRAD sequencing, 2: two-individual test, 3: ten-individual test, 4: Missouri blind trial, 5: Kentucky test, 6: *Andrias* test.