

## Supplementary material

### **A new podocnemidid (Pleurodira: Pelomedusoides) from the Eocene of northwestern Argentina, with comments on its evolutionary relationships and palaeoenvironmental settings**

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1.1. Strict consensus trees of Implied Weighted analysis with all taxa

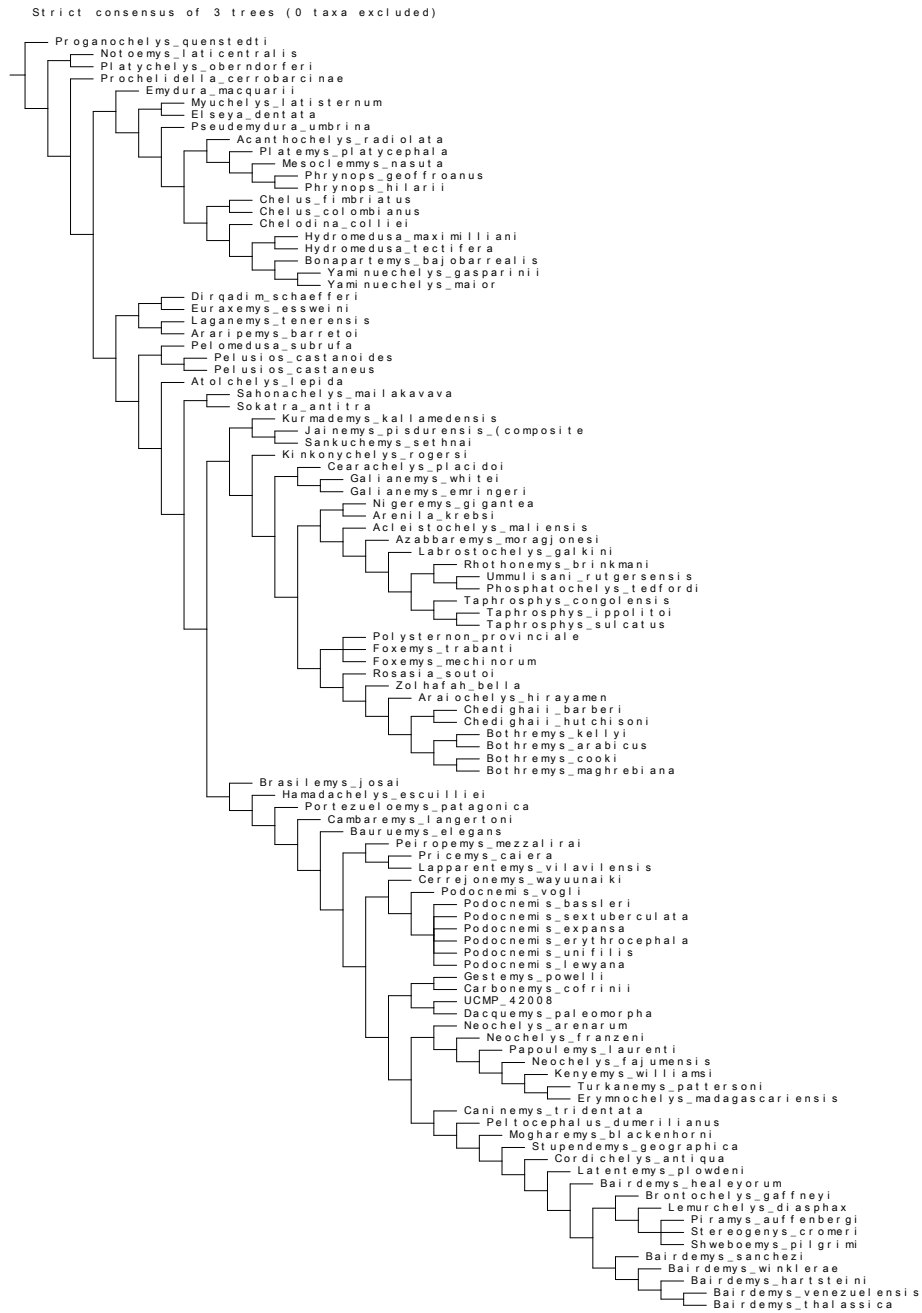
1.2. Bootstrap and Jackknife support information

1.3. Scored of *Gestemys powelli*

1.4. List of common synapomorphies

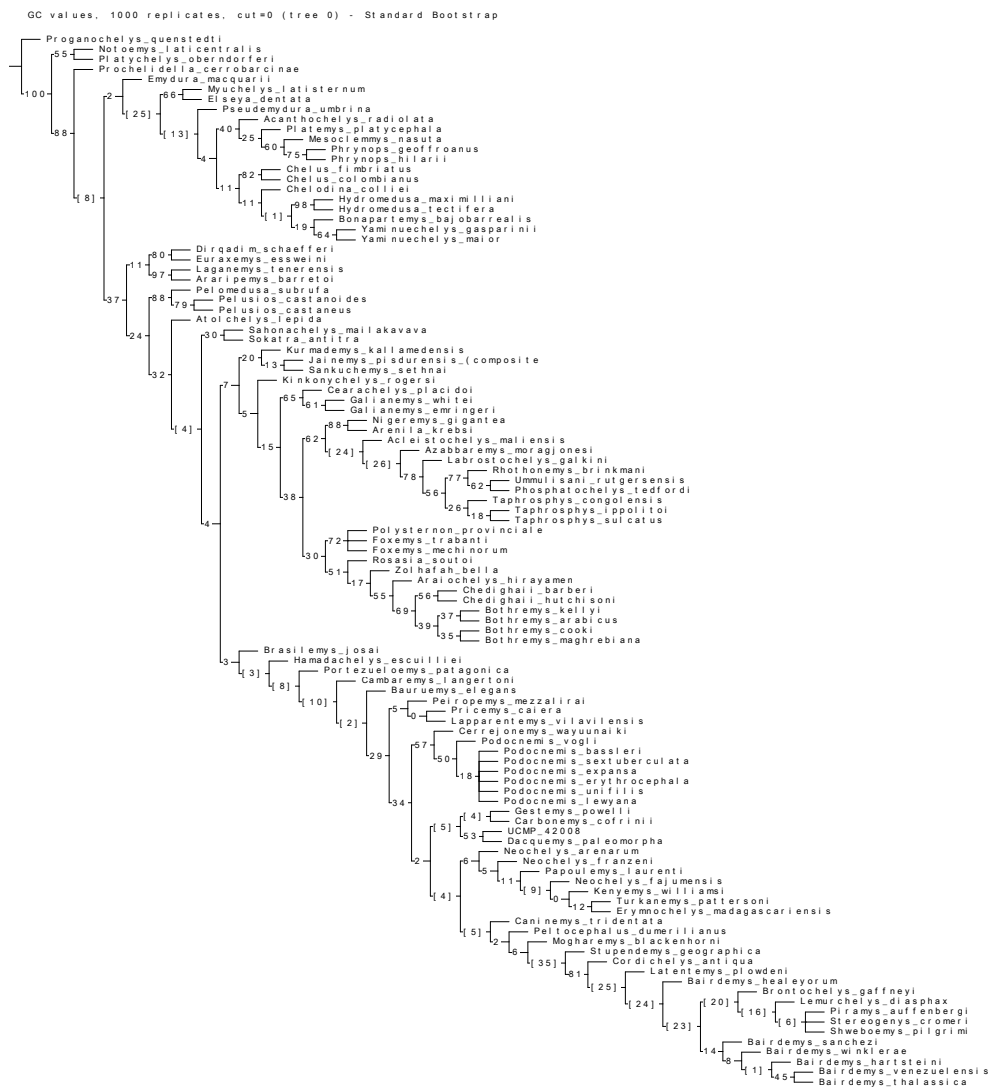
2. Measurements of *Gestemys powelli* specimens

## 1.1 Strict consensus trees

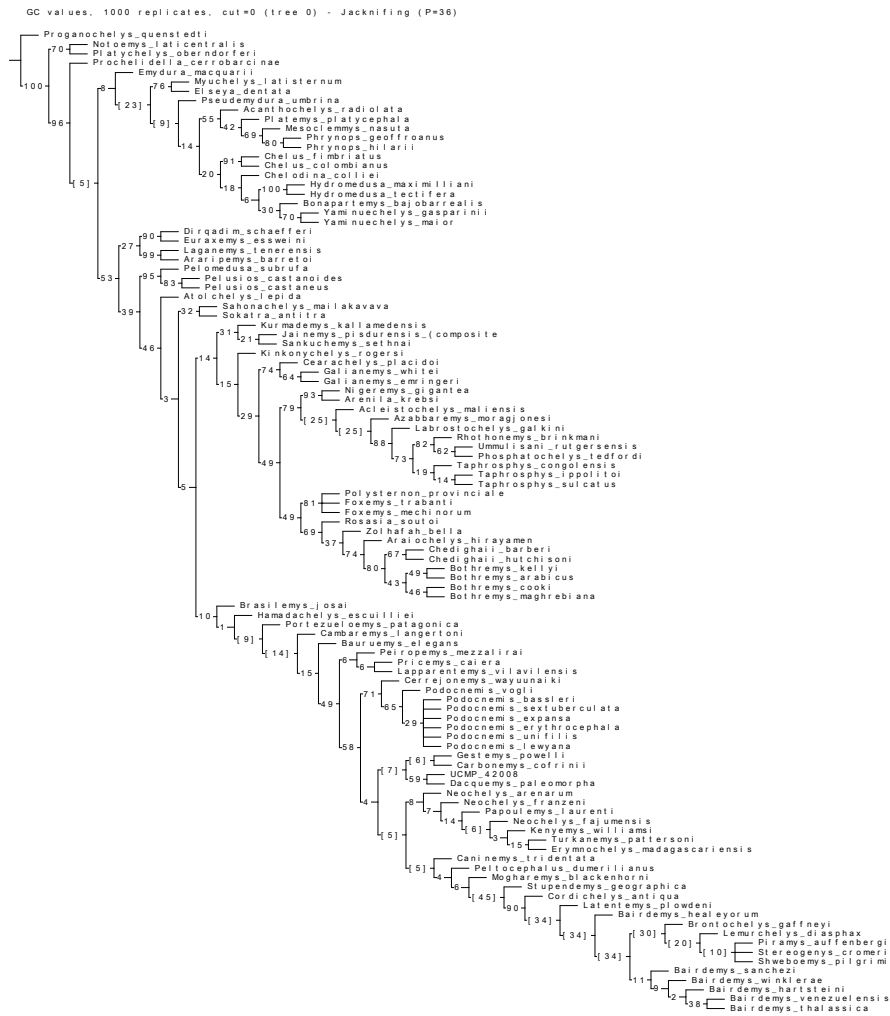


**Supplementary Figure 1.** Strict consensus tree of three most parsimonious trees

## 1.2. Bootstrap and Jackknife support information



Supplementary Figure 4. GC Bootstrap values of 1000 replicates for implied weighted analysis including all taxa.



Supplementary Figure 5. GC Jackknife values of 1000 replicates for implied weighted analysis including all taxa.

### 1.3 Scored of *Gestemys powelli*

0???0 10001 00021 01100 00010 ?---0 00000 00000 ????? ????? 01000  
10100 0000? ????? 11001 0-00? 12000 10110 01112 1?020 1011? ?0100 010?0  
11120 01100 00122 ??100 01000 ?0101 120?? ????? ????? ????? 110?1 10012  
10000 01010 1???0 11102 0?1-- 01100 11100 01101 01010 ??101 11112 1101-  
001?? ?2?0? ????? ????? ?121? 10??? ?00

1.4. List of common  
synapomorphies

**Unweighted analysis**

*Proganochelys\_quenstedti* :

All trees:

No autapomorphies:

*Platychelys\_oberndorferi* :

All trees:

Char. 179: 0 --> 1

Char. 193: 0 --> 1

Char. 201: 0 --> 2

*Notoemys\_laticentralis* :

All trees:

Char. 201: 0 --> 1

Char. 206: 0 --> 1

Char. 207: 0 --> 1

Char. 209: 1 --> 0

*Bonapartemys\_bajobarrealis* :

All trees:

Char. 191: 0 --> 1

Char. 194: 1 --> 2

Char. 208: 0 --> 1

Char. 212: 1 --> 0

Char. 224: 0 --> 1

*Prochelidella\_cerrobarcinae* :

All trees:

Char. 182: 1 --> 2

Char. 199: 0 --> 1

Char. 209: 0 --> 1

*Pseudemydura\_umbrina* :

All trees:

Char. 9: 1 --> 0

Char. 17: 1 --> 0

Char. 81: 2 --> 0

Char. 102: 1 --> 2

Char. 107: 1 --> 0

Char. 111: 1 --> 2

Char. 169: 0 --> 1

Char. 183: 1 --> 0

Char. 216: 0 --> 1

Char. 226: 0 --> 1

Char. 227: 0 --> 1

Char. 229: 0 --> 1

Char. 235: 0 --> 1

Char. 275: 0 --> 1

*Elseya\_dentata* :

All trees:

Char. 47: 0 --> 1

Char. 59: 0 --> 1

Char. 103: 0 --> 1

Char. 128: 1 --> 2

Char. 208: 0 --> 1

*Emydura\_macquarii* :

All trees:

Char. 70: 1 --> 0

Char. 189: 0 --> 1

Char. 192: 1 --> 0

Char. 221: 1 --> 0

*Myuchelys\_latisternum* :

All trees:

Char. 3: 0 --> 1

Char. 8: 0 --> 1

Char. 70: 1 --> 0

Char. 129: 0 --> 2

Char. 191: 1 --> 0

Char. 192: 1 --> 0

Char. 218: 1 --> 0

*Acanthochelys\_radiolata* :

All trees:

Char. 5: 0 --> 1

Char. 98: 2 --> 1

Char. 164: 0 --> 2

Char. 195: 0 --> 1

Char. 223: 0 --> 1

*Platemys\_platycephala* :

All trees:

Char. 9: 1 --> 0

Char. 18: 2 --> 1

Char. 19: 3 --> 0

Char. 34: 2 --> 0

Char. 46: 0 --> 1

Char. 50: 2 --> 0

Char. 65: 0 --> 1

Char. 66: 0 --> 1

Char. 153: 0 --> 3

Char. 157: 0 --> 1

Char. 158: 1 --> 2

Char. 170: 1 --> 2

Char. 179: 0 --> 1

Char. 183: 1 --> 0

Char. 204: 1 --> 0

Char. 213: 0 --> 1

*Phrynops\_hilarii* :

All trees:

Char. 230: 1 --> 0

Char. 271: 0 --> 1

*Phrynops\_geoffroanus* :

All trees:

Char. 192: 2 --> 1

Char. 272: 0 --> 1

*Mesoclemmys\_nasuta* :

All trees:

Char. 87: 1 --> 0

Char. 128: 1 --> 2

Char. 174: 3 --> 4

Char. 176: 0 --> 1

Char. 177: 0 --> 3

Char. 181: 1 --> 2

*Chelodina\_colliei* :

All trees:

Char. 38: 0 --> 1

Char. 61: 0 --> 1

Char. 67: 0 --> 1

Char. 98: 2 --> 1

Char. 117: 1 --> 0

Char. 172: 0 --> 1

Char. 174: 23 --> 5

Char. 176: 0 --> 1

Char. 180: 1 --> 0

Char. 181: 1 --> 0

Char. 183: 1 --> 0

Char. 194: 1 --> 0

Char. 195: 0 --> 1

Char. 200: 1 --> 0

Char. 208: 0 --> 1

Char. 210: 1 --> 0

Char. 211: 1 --> 0

Char. 212: 1 --> 0

Char. 213: 0 --> 1

Char. 214: 1 --> 0

Char. 223: 0 --> 2

Char. 226: 0 --> 1

Char. 227: 0 --> 1

Char. 229: 0 --> 1

Char. 234: 1 --> 0

Char. 243: 0 --> 1

*Chelus\_colombianus* :

All trees:

Char. 190: 1 --> 2	Char. 273: 1 --> 0	Some trees:
Char. 195: 0 --> 1		Char. 100: 1 --> 0
Char. 196: 1 --> 0	Araripemys_barretoi :	
Char. 243: 0 --> 1	All trees:	Cearachelys_placidoi :
	Char. 64: 0 --> 1	All trees:
Chelus_fimbriatus :	Char. 140: 1 --> 0	Char. 69: 1 --> 0
All trees:	Char. 143: 0 --> 1	Char. 81: 1 --> 02
Char. 226: 0 --> 1	Char. 190: 1 --> 0	Char. 82: 1 --> 0
Char. 233: 1 --> 0	Char. 193: 1 --> 0	
	Char. 207: 0 --> 2	Galianemys_emringeri :
Hydromedusa_tectifera :	Char. 209: 0 --> 1	All trees:
All trees:	Char. 224: 1 --> 2	Char. 246: 1 --> 0
Char. 172: 0 --> 1		Char. 247: 1 --> 0
Char. 210: 1 --> 0	Laganemys_tenerensis :	Char. 264: 0 --> 1
Char. 211: 1 --> 0	All trees:	
Char. 212: 1 --> 0	Char. 18: 23 --> 1	Galianemys_whitei :
Char. 274: 2 --> 1	Char. 23: 1 --> 0	All trees:
	Char. 109: 0 --> 1	Char. 255: 0 --> 1
Hydromedusa_maximilliani :	Char. 127: 0 --> 1	
All trees:	Char. 142: 1 --> 0	Kurmademys_kallamedensis :
Char. 181: 1 --> 0	Char. 175: 1 --> 0	All trees:
Char. 206: 1 --> 0	Char. 183: 1 --> 0	Char. 98: 1 --> 0
Char. 236: 0 --> 1	Char. 206: 1 --> 0	Char. 100: 01 --> 2
		Some trees:
Yaminuechelys_maior :	Euraxemys_essweini :	Char. 24: 0 --> 1
All trees:	All trees:	Char. 48: 2 --> 0
Char. 158: 2 --> 3	Char. 46: 1 --> 0	Char. 84: 0 --> 1
Char. 236: 0 --> 1	Char. 100: 1 --> 0	Char. 173: 1 --> 2
		Char. 174: 2 --> 3
Yaminuechelys_gasparinii :	Dirqadim_schaefferi :	Char. 181: 1 --> 2
All trees:	All trees:	Char. 219: 0 --> 2
Char. 219: 1 --> 0	Char. 17: 2 --> 1	Char. 227: 0 --> 1
Char. 244: 1 --> 0	Char. 23: 1 --> 0	Char. 277: 0 --> 1
	Char. 48: 2 --> 0	
Pelusios_castaneus :	Char. 98: 1 --> 2	Sankuchemys_sethnai :
All trees:		All trees:
Char. 43: 0 --> 1	Sokatra_antitra :	Char. 59: 0 --> 1
Char. 103: 0 --> 1	All trees:	Some trees:
	Char. 13: 1 --> 0	Char. 66: 0 --> 1
Pelusios_sinuatus :	Char. 39: 0 --> 1	
All trees:	Char. 59: 0 --> 1	Kinkonychelys_rogersi :
Char. 46: 1 --> 0	Char. 88: 1 --> 0	All trees:
Char. 173: 1 --> 2	Char. 277: 0 --> 1	No autapomorphies:
Pelomedusa_subrufa :	Atolchelys_lepida :	Foxemys_mechinorum :
All trees:	All trees:	Some trees:
Char. 139: 0 --> 1	Char. 53: 0 --> 1	Char. 48: 2 --> 0
Char. 170: 1 --> 2	Char. 66: 0 --> 1	Char. 219: 2 --> 0
Char. 180: 0 --> 1	Char. 70: 1 --> 0	Char. 223: 0 --> 1
Char. 207: 0 --> 1	Char. 98: 1 --> 2	
Char. 245: 1 --> 2	Char. 216: 0 --> 1	Foxemys_trabanti :
Char. 272: 0 --> 1	Char. 236: 0 --> 1	



All trees:	Char. 98: 2 --> 1	Phosphatochelys_tedfordi :
No autapomorphies:		All trees:
Polysternon_provinciale :	Chedighaii_hutchisoni :	Char. 24: 0 --> 1
All trees:	All trees:	Char. 271: 0 --> 1
Char. 169: 0 --> 1	No autapomorphies:	Char. 274: 0 --> 2
Char. 216: 1 --> 0	Chedighaii_barberi :	Ummulisani_rutgersensis :
Some trees:	All trees:	All trees:
Char. 110: 0 --> 1	Char. 55: 2 --> 1	Char. 85: 0 --> 3
Araiochelys_hirayamai :	Taphrosphys_sulcatus :	Char. 100: 1 --> 2
All trees:	All trees:	Char. 102: 0 --> 1
Char. 4: 1 --> 0	Char. 102: 0 --> 1	Char. 245: 1 --> 2
Char. 9: 2 --> 1	Char. 114: 1 --> 0	Rhothonemys_brinkmani :
Char. 102: 0 --> 1	Taphrosphys_ippolitoi :	All trees:
Char. 141: 2 --> 0	All trees:	No autapomorphies:
Char. 173: 1 --> 2	No autapomorphies:	Arenila_krebsi :
Char. 175: 1 --> 2	Taphrosphys_congolensis :	All trees:
Char. 201: 0 --> 1	All trees:	No autapomorphies:
Char. 228: 0 --> 1	No autapomorphies:	Nigeremys_gigantea :
Char. 255: 0 --> 1	Acleistochelys_maliensis :	All trees:
Zolhafah_bella :	All trees:	Char. 70: 1 --> 0
All trees:	Char. 33: 0 --> 1	Brasilemys_josai :
Char. 32: 1 --> 0	Char. 53: 0 --> 1	All trees:
Char. 44: 0 --> 1	Char. 59: 0 --> 1	Char. 80: 2 --> 1
Char. 55: 2 --> 1	Char. 60: 0 --> 1	Char. 81: 2 --> 0
Char. 57: 0 --> 1	Char. 77: 01 --> 2	Char. 108: 0 --> 1
Char. 106: 1 --> 0	Char. 88: 0 --> 1	Char. 174: 2 --> 1
Char. 114: 1 --> 2	Char. 94: 2 --> 0	Hamadachelys_escuilliei :
Rosasia_soutoi :	Char. 109: 1 --> 0	All trees:
All trees:	Azabbaremys_moragjonesi :	Char. 147: 0 --> 1
Char. 181: 12 --> 0	All trees:	Char. 251: 1 --> 0
Char. 201: 0 --> 1	Char. 43: 1 --> 0	Char. 255: 0 --> 1
Bothremys_maghrebiana :	Char. 45: 0 --> 1	Portezueloemys_patagonica :
All trees:	Char. 85: 0 --> 3	All trees:
Char. 32: 1 --> 0	Char. 110: 1 --> 0	Char. 27: 0 --> 1
Char. 110: 0 --> 1	Labrostochelys_galkini :	Char. 173: 1 --> 2
Bothremys_cooki :	All trees:	Char. 207: 0 --> 2
All trees:	Char. 6: 0 --> 1	Bauruemys_elegans :
No autapomorphies:	Char. 44: 0 --> 1	All trees:
Bothremys_arabicus :	Char. 51: 01 --> 2	Char. 173: 1 --> 2
All trees:	Char. 73: 1 --> 0	Char. 177: 0 --> 1
No autapomorphies:	Char. 85: 0 --> 1	Char. 265: 0 --> 1
Bothremys_kellyi :	Char. 100: 1 --> 2	Some trees:
All trees:	Char. 246: 1 --> 0	Char. 157: 0 --> 1
Char. 32: 1 --> 0	Char. 248: 1 --> 0	

Cambaremys_langertoni :	Podocnemis_sextuberculata :	Char. 245: 1 --> 0
All trees:	All trees:	Some trees:
Char. 170: 1 --> 2	No autapomorphies:	Char. 48: 2 --> 0
		Char. 59: 0 --> 1
Peiropemys_mezzalirai :	Podocnemis_bassleri :	Char. 70: 2 --> 1
All trees:	All trees:	Char. 80: 02 --> 1
Char. 54: 1 --> 0	Char. 51: 1 --> 0	Char. 207: 0 --> 2
	Char. 52: 0 --> 1	Char. 233: 0 --> 1
Lapparentemys_vilavilensis :	Caninemys_tridentata :	Kenyemys_williamsi :
All trees:	All trees:	All trees:
No autapomorphies:	Char. 26: 0 --> 1	Char. 178: 0 --> 1
	Char. 28: 0 --> 1	Some trees:
Pricemys_caiera :	Char. 52: 0 --> 1	Char. 169: 0 --> 1
All trees:	Char. 73: 0 --> 1	Char. 172: 0 --> 1
Char. 26: 0 --> 2	Char. 80: 2 --> 0	Char. 200: 1 --> 0
Char. 28: 0 --> 1	Char. 85: 1 --> 2	Char. 210: 0 --> 1
	Char. 87: 1 --> 0	
Cerrejonemys_wayuunaiki :	Stupendemys_geographicus :	Turkanemys_pattersoni :
All trees:	Some trees:	All trees:
Char. 64: 0 --> 1	Char. 159: 0 --> 1	Char. 137: 0 --> 1
Char. 134: 0 --> 1	Char. 169: 0 --> 1	Char. 171: 1 --> 0
	Char. 204: 0 --> 1	Char. 189: 0 --> 1
Podocnemis_vogli :		Char. 241: 2 --> 1
All trees:	Dacquemys_paleomorpha :	Some trees:
Char. 174: 2 --> 1	All trees:	Char. 40: 0 --> 1
Char. 236: 0 --> 1	Char. 137: 0 --> 1	Char. 201: 1 --> 0
	Some trees:	
Podocnemis_lewyana :	Char. 13: 0 --> 1	
All trees:	Char. 45: 0 --> 1	Erymnochelys_madagascariensis :
No autapomorphies:	Char. 46: 1 --> 0	All trees:
		Char. 13: 1 --> 0
Podocnemis_unifilis :	UCMP_42008 :	Char. 26: 0 --> 1
All trees:	All trees:	Char. 105: 1 --> 0
Char. 171: 1 --> 0	Char. 1: 0 --> 1	Some trees:
Char. 274: 0 --> 2	Char. 31: 0 --> 1	Char. 181: 1 --> 2
	Char. 86: 0 --> 1	
Podocnemis_erythrocephala :	Char. 107: 1 --> 0	Neochelys_fajumensis :
All trees:	Some trees:	All trees:
Char. 160: 0 --> 1	Char. 13: 01 --> 0	Char. 80: 2 --> 1
Char. 170: 1 --> 2		Char. 167: 0 --> 1
Char. 171: 1 --> 0	Carbonemys_cofrinii :	Char. 185: 0 --> 1
Char. 181: 2 --> 1	All trees:	Some trees:
Char. 207: 1 --> 2	Char. 87: 1 --> 0	Char. 201: 1 --> 0
Char. 219: 0 --> 2	Char. 245: 1 --> 2	
		Neochelys_arenarum :
Podocnemis_expansa :	Peltocephalus_dumerilianus :	All trees:
All trees:	All trees:	Char. 70: 1 --> 0
Char. 77: 0 --> 1	Char. 31: 0 --> 1	Some trees:
Char. 207: 1 --> 2	Char. 105: 1 --> 0	Char. 40: 0 --> 1
Char. 221: 0 --> 1	Char. 227: 1 --> 0	Char. 173: 1 --> 2

Char. 174: 2 --> 3	Latentemys_plowdeni :	Tartaruscola_teodorii :
Neochelys_franzeni :	All trees:	All trees:
All trees:	Char. 40: 1 --> 0	Char. 1: 0 --> 1
Char. 147: 1 --> 0	Char. 245: 1 --> 2	Char. 13: 0 --> 1
Char. 228: 1 --> 0	Bairdemys_thalassica :	Char. 17: 2 --> 1
Papoulemys_laurenti :	All trees:	Char. 42: 0 --> 1
Some trees:	Char. 102: 0 --> 1	Char. 43: 1 --> 0
Char. 40: 0 --> 1	Bairdemys_healeyorum :	Char. 46: 0 --> 1
Char. 173: 2 --> 1	All trees:	Char. 48: 2 --> 1
Char. 184: 0 --> 1	Char. 180: 0 --> 1	Char. 51: 0 --> 1
Char. 219: 2 --> 0	Char. 241: 1 --> 0	Char. 57: 0 --> 1
Mogharemys_blackenhorni :	Bairdemys_venezuelensis :	Char. 59: 0 --> 1
All trees:	All trees:	Char. 65: 1 --> 0
Char. 53: 0 --> 1	No autapomorphies:	Char. 81: 1 --> 0
Char. 113: 0 --> 1	Bairdemys_hartsteini :	Char. 87: 0 --> 1
Char. 117: 1 --> 0	All trees:	Char. 102: 0 --> 1
Some trees:	No autapomorphies:	Char. 110: 0 --> 1
Char. 70: 1 --> 2		Chupacabrachelys_complexus :
Brontochelys_gaffneyi :	Bairdemys_sanchezi :	All trees:
All trees:	All trees:	Char. 18: 1 --> 0
No autapomorphies:	Char. 17: 1 --> 2	Char. 52: 0 --> 1
Lemurchelys_diasphax :	Char. 58: 1 --> 0	Char. 56: 0 --> 1
All trees:	Char. 110: 1 --> 0	Char. 63: 1 --> 0
Char. 110: 1 --> 0	Char. 128: 2 --> 1	Char. 169: 0 --> 1
Shweboemys_pilgrimi :	Char. 277: 0 --> 1	Char. 170: 1 --> 0
All trees:	Some trees:	Char. 173: 1 --> 2
No autapomorphies:	Char. 18: 0 --> 1	Char. 174: 2 --> 3
Stereogenys_cromeri :	Bairdemys_winklerae :	Char. 184: 1 --> 0
All trees:	Some trees:	Char. 222: 1 --> 2
Char. 42: 1 --> 0	Char. 18: 0 --> 1	Some trees:
Char. 129: 1 --> 2	Piramys_auffenbergi :	Char. 217: 1 --> 0
Cordichelys_antiqua :	All trees:	Eocenchelus_eremberti :
All trees:	Char. 8: 0 --> 1	All trees:
Char. 8: 0 --> 1	Char. 119: 0 --> 1	Char. 15: 0 --> 1
Char. 32: 1 --> 0	Amabilis_uchoensis :	Char. 27: 0 --> 1
Char. 76: 0 --> 1	All trees:	Char. 42: 0 --> 1
Char. 181: 2 --> 1	Char. 70: 1 --> 0	Char. 52: 0 --> 1
Char. 182: 1 --> 2	Char. 122: 1 --> 0	Char. 201: 1 --> 0
Char. 192: 1 --> 0	Char. 264: 2 --> 1	Some trees:
Char. 205: 0 --> 1	Yuraramirim_montealtensis :	Char. 9: 0 --> 1
Some trees:	All trees:	Char. 219: 02 --> 2
Char. 169: 0 --> 1	Char. 85: 1 --> 0	Paiutemys_tibert :
Char. 233: 1 --> 0	Char. 116: 1 --> 0	All trees:
	Char. 128: 2 --> 1	Char. 200: 1 --> 0
		Char. 216: 1 --> 0
		Char. 233: 1 --> 0

<p>Algorachelus_peregrinus :</p> <p>All trees:</p> <p>Char. 92: 1 --&gt; 0</p> <p>Char. 216: 1 --&gt; 0</p> <p>Some trees:</p> <p>Char. 217: 1 --&gt; 0</p>	<p>Mendozachelys_wichmanni :</p> <p>All trees:</p> <p>Char. 182: 1 --&gt; 0</p> <p>Char. 195: 0 --&gt; 1</p> <p>Char. 216: 0 --&gt; 1</p> <p>Char. 219: 0 --&gt; 1</p>	<p>Elusor_macrurus :</p> <p>All trees:</p> <p>Char. 39: 1 --&gt; 0</p> <p>Char. 92: 0 --&gt; 1</p> <p>Char. 210: 1 --&gt; 0</p> <p>Char. 219: 2 --&gt; 0</p> <p>Char. 235: 0 --&gt; 1</p>
<p>Palemys_bowerbankii :</p> <p>All trees:</p> <p>Char. 180: 1 --&gt; 0</p> <p>Char. 181: 1 --&gt; 2</p> <p>Char. 202: 1 --&gt; 0</p>	<p>Rionegrochelys_caldieroi :</p> <p>All trees:</p> <p>Char. 193: 0 --&gt; 1</p> <p>Char. 226: 0 --&gt; 1</p> <p>Char. 233: 1 --&gt; 0</p>	<p>Linderochelys_rinconensis :</p> <p>All trees:</p> <p>Char. 168: 0 --&gt; 1</p>
<p>Puentemys_mushaisaensis :</p> <p>All trees:</p> <p>Char. 170: 1 --&gt; 2</p> <p>Char. 207: 1 --&gt; 0</p> <p>Some trees:</p> <p>Char. 113: 2 --&gt; 1</p> <p>Char. 129: 1 --&gt; 2</p> <p>Char. 204: 0 --&gt; 1</p> <p>Char. 223: 0 --&gt; 1</p> <p>Char. 233: 1 --&gt; 0</p>	<p>Lomalatachelys_neuquina :</p> <p>All trees:</p> <p>Char. 173: 2 --&gt; 1</p> <p>Char. 180: 0 --&gt; 1</p> <p>Char. 183: 1 --&gt; 0</p>	<p>Palaeophrynops_patagonicus :</p> <p>All trees:</p> <p>Char. 181: 1 --&gt; 2</p> <p>Char. 222: 1 --&gt; 2</p>
<p>Elochelys_perfecta :</p> <p>All trees:</p> <p>Char. 206: 1 --&gt; 0</p> <p>Char. 229: 0 --&gt; 1</p> <p>Char. 276: 0 --&gt; 1</p>	<p>Dortoka_vasconica :</p> <p>All trees:</p> <p>Char. 170: 1 --&gt; 2</p> <p>Char. 190: 1 --&gt; 2</p> <p>Char. 210: 1 --&gt; 0</p> <p>Char. 222: 1 --&gt; 2</p> <p>Char. 241: 2 --&gt; 0</p> <p>Char. 278: 0 --&gt; 1</p>	<p>Salamanchelys_palaeocenica :</p> <p>All trees:</p> <p>Char. 177: 0 --&gt; 1</p> <p>Char. 201: 0 --&gt; 2</p> <p>Char. 219: 2 --&gt; 0</p> <p>Char. 223: 0 --&gt; 2</p> <p>Char. 224: 2 --&gt; 1</p> <p>Char. 240: 1 --&gt; 0</p> <p>Char. 241: 1 --&gt; 0</p>
<p>Hydromedusa_casamayorensis :</p> <p>All trees:</p> <p>Char. 125: 1 --&gt; 0</p> <p>Char. 183: 1 --&gt; 0</p> <p>Char. 193: 0 --&gt; 1</p> <p>Char. 202: 1 --&gt; 0</p> <p>Char. 214: 1 --&gt; 0</p> <p>Char. 215: 0 --&gt; 1</p> <p>Char. 233: 1 --&gt; 0</p>	<p>Dortoka_botanica :</p> <p>All trees:</p> <p>Char. 182: 1 --&gt; 2</p> <p>Char. 184: 0 --&gt; 1</p> <p>Char. 208: 0 --&gt; 1</p> <p>Char. 226: 0 --&gt; 1</p> <p>Char. 230: 1 --&gt; 0</p>	<p>Podocnemis_pritchardi :</p> <p>All trees:</p> <p>Char. 180: 0 --&gt; 1</p> <p>Char. 224: 1 --&gt; 0</p> <p>Char. 244: 0 --&gt; 1</p>
<p>Platycheloides_nyasae :</p> <p>All trees:</p> <p>Char. 173: 1 --&gt; 2</p> <p>Char. 177: 2 --&gt; 3</p> <p>Char. 192: 1 --&gt; 0</p>	<p>Birimarr_gaffneyi :</p> <p>All trees:</p> <p>Char. 125: 1 --&gt; 0</p> <p>Char. 180: 0 --&gt; 1</p> <p>Char. 218: 1 --&gt; 0</p> <p>Char. 226: 0 --&gt; 1</p>	<p>Podocnemis_negrii :</p> <p>All trees:</p> <p>Char. 178: 0 --&gt; 1</p>
<p>Teneremys_lapparenti :</p> <p>All trees:</p> <p>Char. 215: 0 --&gt; 1</p>	<p>Notoemys_zapatocaensis :</p> <p>All trees:</p> <p>Char. 170: 0 --&gt; 1</p> <p>Char. 210: 1 --&gt; 0</p> <p>Char. 214: 0 --&gt; 1</p> <p>Char. 229: 0 --&gt; 1</p> <p>Char. 230: 1 --&gt; 0</p>	<p>Podocnemis_medemi :</p> <p>All trees:</p> <p>Char. 181: 2 --&gt; 1</p> <p>Char. 207: 1 --&gt; 0</p> <p>Char. 219: 0 --&gt; 2</p> <p>Char. 231: 0 --&gt; 1</p>
		<p>Ilatardia_cetiotesta :</p> <p>All trees:</p> <p>Char. 4: 0 --&gt; 1</p> <p>Char. 22: 0 --&gt; 1</p> <p>Char. 50: 0 --&gt; 1</p> <p>Char. 74: 0 --&gt; 1</p>

Char. 85: 0 --> 2		Char. 202: 0 --> 1
Char. 264: 0 --> 1		Char. 204: 0 --> 1
		Char. 206: 0 --> 1
Gestemys_powelli :	Node 137 :	
All trees:	All trees:	Node 144 :
Char. 171: 1 --> 0	Char. 180: 1 --> 0	All trees:
Char. 173: 12 --> 2	Char. 195: 0 --> 1	Char. 180: 0 --> 1
Char. 181: 2 --> 1	Char. 210: 1 --> 0	Char. 205: 0 --> 1
Some trees:	Char. 235: 0 --> 1	Char. 218: 1 --> 0
Char. 54: 1 --> 0	Node 138 :	
Char. 80: 2 --> 1	All trees:	Node 145 :
Char. 94: 3 --> 2	Char. 169: 0 --> 1	All trees:
Char. 98: 1 --> 2	Char. 185: 1 --> 0	Char. 88: 0 --> 1
Char. 114: 1 --> 0	Char. 219: 2 --> 1	Char. 234: 0 --> 1
Char. 127: 0 --> 1		Char. 241: 2 --> 1
Char. 129: 1 --> 2	Node 139 :	
Char. 169: 0 --> 1	All trees:	Node 146 :
Char. 174: 2 --> 3	Char. 181: 1 --> 2	All trees:
Char. 182: 1 --> 0	Char. 224: 2 --> 0	Char. 98: 1 --> 2
Char. 185: 0 --> 1	Char. 238: 0 --> 1	Char. 140: 1 --> 0
Char. 193: 1 --> 0	Char. 244: 0 --> 1	Char. 202: 1 --> 0
Char. 200: 1 --> 0		
Char. 205: 0 --> 1	Node 140 :	Node 147 :
Char. 216: 0 --> 1	All trees:	All trees:
Char. 217: 1 --> 0	Char. 72: 0 --> 1	Char. 49: 0 --> 1
Char. 229: 0 --> 1	Char. 107: 1 --> 0	Char. 67: 1 --> 0
Char. 231: 0 --> 1	Char. 157: 0 --> 1	Char. 125: 0 --> 1
Char. 234: 1 --> 0	Char. 174: 23 --> 1	Char. 266: 1 --> 0
Char. 241: 1 --> 0		
Char. 263: 0 --> 1	Node 141 :	Node 148 :
Char. 265: 0 --> 1	All trees:	All trees:
Char. 266: 0 --> 1	Char. 9: 1 --> 2	Char. 173: 2 --> 4
Char. 268: 0 --> 1	Char. 19: 3 --> 2	Char. 206: 1 --> 0
Char. 281: 2 --> 0	Char. 150: 0 --> 1	
	Char. 168: 0 --> 1	Node 149 :
	Char. 264: 2 --> 1	All trees:
Node 134 :		Char. 54: 1 --> 0
All trees:	Node 142 :	Char. 159: 1 --> 0
Char. 187: 0 --> 1	All trees:	Char. 173: 1 --> 2
Char. 205: 0 --> 1	Char. 0: 0 --> 2	Char. 191: 0 --> 1
Char. 225: 1 --> 0	Char. 42: 0 --> 1	Char. 196: 0 --> 1
Char. 283: 0 --> 1	Char. 128: 1 --> 0	Char. 276: 0 --> 1
	Char. 149: 0 --> 1	Char. 282: 0 --> 1
Node 135 :	Char. 152: 0 --> 2	
All trees:	Char. 161: 0 --> 1	Node 150 :
No synapomorphies	Char. 162: 0 --> 1	All trees:
	Char. 173: 4 --> 12	Char. 173: 0 --> 1
Node 136 :	Char. 199: 1 --> 0	Char. 174: 0 --> 2
All trees:	Char. 252: 0 --> 1	Char. 175: 0 --> 1
Char. 194: 1 --> 2		Char. 209: 1 --> 0
Char. 195: 0 --> 1	Node 143 :	Char. 233: 0 --> 1
Char. 200: 1 --> 0	All trees:	Char. 238: 1 --> 0
Char. 284: 0 --> 1	Char. 192: 1 --> 2	

Char. 281: 1 --> 2		Char. 88: 0 --> 1
Node 151 :	Node 158 :	Char. 96: 0 --> 1
All trees:	All trees:	Char. 132: 0 --> 1
Char. 163: 0 --> 1	Char. 171: 1 --> 0	Char. 148: 1 --> 2
Char. 170: 0 --> 1	Char. 175: 1 --> 0	Char. 197: 0 --> 1
Char. 186: 0 --> 1	Char. 177: 0 --> 1	Char. 210: 1 --> 0
Char. 202: 0 --> 1	Char. 190: 1 --> 0	Char. 234: 0 --> 1
Char. 206: 0 --> 1	Char. 192: 12 --> 3	Char. 241: 2 --> 1
	Char. 205: 1 --> 0	Char. 247: 0 --> 1
	Char. 235: 0 --> 1	Char. 261: 0 --> 1
Node 152 :		
All trees:	Node 159 :	Node 164 :
Char. 43: 0 --> 1	All trees:	All trees:
Char. 54: 0 --> 1	Char. 164: 0 --> 1	Char. 9: 1 --> 2
Char. 121: 0 --> 1	Char. 198: 0 --> 1	Char. 98: 1 --> 2
Char. 195: 0 --> 1		Char. 182: 1 --> 0
Char. 197: 0 --> 1	Node 160 :	Char. 184: 1 --> 0
Char. 204: 0 --> 1	All trees:	Char. 205: 0 --> 1
Char. 269: 0 --> 1	Char. 170: 1 --> 0	Char. 214: 1 --> 0
	Char. 181: 2 --> 1	Char. 222: 1 --> 0
Node 153 :	Char. 207: 0 --> 1	Char. 223: 0 --> 2
All trees:	Char. 225: 1 --> 0	Char. 225: 1 --> 0
Char. 101: 0 --> 1		Char. 230: 1 --> 2
Char. 194: 1 --> 2	Node 161 :	Char. 276: 0 --> 1
	All trees:	
Node 154 :	Char. 59: 0 --> 1	Node 165 :
All trees:	Char. 206: 1 --> 0	All trees:
Char. 99: 0 --> 1		Char. 0: 1 --> 2
Char. 196: 1 --> 0	Node 162 :	Char. 128: 1 --> 0
Char. 210: 1 --> 0	All trees:	Char. 169: 0 --> 1
Char. 240: 1 --> 0	Char. 18: 2 --> 3	Char. 170: 1 --> 02
	Char. 19: 0 --> 2	Char. 171: 1 --> 2
Node 155 :	Char. 48: 2 --> 0	Char. 177: 0 --> 2
All trees:	Char. 64: 0 --> 1	Char. 200: 1 --> 2
Char. 219: 2 --> 1	Char. 98: 1 --> 2	
Char. 236: 0 --> 1	Char. 109: 0 --> 1	Node 166 :
	Char. 129: 0 --> 2	All trees:
Node 156 :	Char. 134: 0 --> 1	Char. 13: 1 --> 2
All trees:	Char. 167: 0 --> 1	Char. 81: 2 --> 0
Char. 4: 0 --> 1	Char. 190: 1 --> 0	Char. 139: 0 --> 1
Char. 152: 0 --> 1	Char. 236: 0 --> 1	Char. 174: 2 --> 01
Char. 173: 4 --> 3	Char. 274: 0 --> 2	
Char. 269: 0 --> 1		Node 167 :
	Node 163 :	All trees:
Node 157 :	All trees:	Char. 111: 1 --> 2
All trees:	Char. 0: 0 --> 1	Char. 117: 1 --> 0
Char. 175: 1 --> 0	Char. 2: 0 --> 1	Char. 162: 0 --> 1
Char. 178: 0 --> 1	Char. 5: 0 --> 1	Char. 193: 0 --> 1
Char. 179: 0 --> 1	Char. 17: 1 --> 2	Char. 250: 1 --> 0
Char. 193: 0 --> 2	Char. 18: 0 --> 2	
Char. 219: 2 --> 1	Char. 23: 0 --> 1	Node 168 :
Char. 244: 0 --> 1	Char. 46: 0 --> 1	All trees:

Char. 18: 2 --> 1	Char. 74: 0 --> 1	Node 182 :
Char. 59: 0 --> 1	Char. 91: 0 --> 1	All trees:
Char. 80: 2 --> 1	Char. 118: 1 --> 2	Char. 9: 1 --> 2
Char. 100: 2 --> 1	Char. 128: 1 --> 2	Char. 53: 0 --> 1
Char. 108: 0 --> 1		
Char. 127: 0 --> 1	Node 176 :	Node 183 :
Char. 128: 1 --> 2	All trees:	All trees:
	Char. 84: 0 --> 1	Char. 33: 0 --> 1
Node 169 :	Char. 109: 1 --> 0	Char. 60: 0 --> 1
All trees:	Char. 127: 0 --> 1	Char. 74: 1 --> 2
Char. 129: 0 --> 1		
	Node 177 :	Node 184 :
Node 170 :	All trees:	All trees:
All trees:	Char. 53: 0 --> 1	Char. 55: 1 --> 2
Char. 92: 0 --> 1	Char. 82: 1 --> 0	Char. 56: 1 --> 2
Char. 93: 0 --> 1	Char. 227: 0 --> 1	Char. 263: 0 --> 1
Char. 94: 1 --> 2	Some trees:	
Char. 100: 2 --> 01	Char. 44: 0 --> 1	Node 185 :
	Char. 231: 0 --> 1	All trees:
Node 171 :		Char. 206: 1 --> 0
All trees:	Node 178 :	Char. 226: 1 --> 0
Char. 30: 0 --> 1	All trees:	
Char. 122: 1 --> 0	Char. 4: 0 --> 1	Node 186 :
Char. 123: 0 --> 1	Char. 12: 0 --> 1	All trees:
	Char. 143: 0 --> 1	Char. 50: 0 --> 1
Node 172 :	Char. 215: 0 --> 1	
All trees:		Node 187 :
Char. 80: 2 --> 0	Node 179 :	All trees:
Char. 119: 0 --> 1	All trees:	Char. 51: 1 --> 2
	Char. 86: 0 --> 1	
Node 173 :	Char. 120: 0 --> 1	Node 188 :
All trees:	Char. 133: 0 --> 1	All trees:
Char. 87: 1 --> 0	Char. 145: 0 --> 1	Char. 52: 0 --> 1
Some trees:	Char. 216: 0 --> 1	Char. 92: 1 --> 0
Char. 109: 0 --> 1	Char. 249: 1 --> 0	Char. 126: 0 --> 1
	Char. 251: 1 --> 0	Char. 129: 1 --> 2
Node 174 :	Char. 267: 1 --> 0	
All trees:		Node 189 :
Char. 19: 0 --> 1	Node 180 :	All trees:
Char. 113: 1 --> 2	All trees:	Char. 44: 0 --> 1
Some trees:	Char. 1: 0 --> 1	Char. 114: 1 --> 2
Char. 69: 0 --> 1	Char. 6: 0 --> 1	
Char. 81: 2 --> 1	Char. 42: 0 --> 1	Node 190 :
Char. 82: 0 --> 1	Char. 51: 0 --> 1	All trees:
Char. 88: 1 --> 0	Char. 98: 1 --> 2	Char. 33: 1 --> 0
Char. 89: 0 --> 1		Char. 60: 1 --> 0
Char. 135: 0 --> 1	Node 181 :	
Char. 141: 0 --> 2	All trees:	Node 191 :
	Char. 93: 1 --> 0	All trees:
Node 175 :	Char. 100: 0 --> 1	Char. 131: 0 --> 1
All trees:	Char. 101: 0 --> 1	
Char. 56: 0 --> 1		Node 192 :

All trees:	Char. 92: 1 --> 0	
Char. 98: 2 --> 1	Char. 110: 0 --> 1	Node 210 :
	Char. 129: 1 --> 2	All trees:
Node 193 :		Char. 13: 1 --> 2
All trees:	Node 200 :	
Char. 41: 0 --> 1	All trees:	Node 211 :
Char. 97: 0 --> 1	Char. 7: 0 --> 1	All trees:
Char. 255: 0 --> 1		Char. 16: 0 --> 1
Char. 264: 0 --> 2	Node 201 :	Char. 18: 2 --> 0
Char. 269: 0 --> 1	All trees:	Char. 105: 0 --> 1
	Char. 21: 0 --> 1	Char. 115: 0 --> 1
Node 194 :	Char. 29: 1 --> 0	Char. 156: 0 --> 1
All trees:	Char. 52: 0 --> 1	Char. 165: 2 --> 1
Char. 15: 1 --> 0		Char. 250: 0 --> 1
Char. 19: 1 --> 0	Node 202 :	Char. 252: 0 --> 1
Char. 53: 0 --> 1	All trees:	
Char. 93: 1 --> 0	Char. 54: 1 --> 0	Node 212 :
	Char. 85: 0 --> 3	All trees:
Node 195 :	Char. 87: 0 --> 2	Char. 80: 2 --> 1
All trees:		
Char. 1: 0 --> 1	Node 203 :	Node 213 :
Char. 9: 0 --> 1	All trees:	All trees:
Char. 35: 0 --> 1	Char. 155: 1 --> 0	Char. 22: 0 --> 1
Char. 36: 0 --> 1	Char. 206: 1 --> 0	Char. 39: 0 --> 1
	Char. 264: 0 --> 2	
Node 196 :		Node 214 :
All trees:	Node 204 :	All trees:
Char. 29: 0 --> 1	All trees:	Char. 206: 0 --> 1
	Char. 96: 1 --> 0	Some trees:
Node 197 :	Char. 116: 0 --> 1	Char. 55: 0 --> 1
All trees:	Char. 117: 0 --> 1	Char. 56: 1 --> 0
Char. 98: 1 --> 2		Char. 57: 0 --> 1
Char. 100: 0 --> 1	Node 205 :	Char. 95: 0 --> 1
Char. 101: 0 --> 1	All trees:	Char. 144: 0 --> 1
Char. 106: 1 --> 0	Char. 85: 0 --> 1	Char. 191: 0 --> 1
Char. 263: 0 --> 1	Char. 113: 1 --> 0	Char. 207: 0 --> 01
Node 198 :	Node 206 :	Node 215 :
All trees:	All trees:	All trees:
Char. 9: 1 --> 0	Char. 17: 2 --> 1	Char. 208: 0 --> 1
Char. 38: 0 --> 1		
Char. 42: 0 --> 1	Node 207 :	Node 216 :
Char. 46: 0 --> 1	All trees:	All trees:
Char. 66: 0 --> 1	Char. 238: 0 --> 1	Char. 95: 1 --> 0
		Char. 182: 1 --> 0
Node 199 :	Node 208 :	Char. 200: 1 --> 0
All trees:	All trees:	Char. 221: 1 --> 0
Char. 51: 0 --> 1	Char. 227: 0 --> 1	
Char. 55: 1 --> 0		Node 217 :
Char. 56: 1 --> 0	Node 209 :	All trees:
Char. 73: 0 --> 1	All trees:	Char. 8: 0 --> 1
Char. 74: 1 --> 0	Char. 70: 1 --> 0	Char. 137: 0 --> 1



Node 218 :	Char. 75: 0 --> 1	Char. 181: 1 --> 2
All trees:	Char. 89: 0 --> 1	Char. 190: 1 --> 2
Char. 26: 0 --> 1	Char. 127: 0 --> 1	Char. 207: 0 --> 1
Char. 54: 1 --> 0	Some trees:	Node 235 :
Char. 64: 0 --> 1	Char. 44: 0 --> 1	All trees:
Node 219 :	Char. 56: 0 --> 2	Char. 204: 0 --> 1
All trees:	Char. 125: 0 --> 1	Node 236 :
Char. 219: 0 --> 2	Char. 173: 12 --> 2	All trees:
Node 220 :	Char. 174: 2 --> 3	Char. 193: 0 --> 1
All trees:	Char. 201: 1 --> 2	Node 237 :
Char. 48: 2 --> 1	Node 228 :	All trees:
Char. 95: 0 --> 1	All trees:	Char. 244: 0 --> 1
Char. 236: 0 --> 1	Char. 76: 0 --> 1	Node 238 :
Node 221 :	Node 229 :	All trees:
All trees:	All trees:	Char. 180: 0 --> 1
Char. 46: 0 --> 1	Char. 32: 1 --> 0	Char. 185: 0 --> 1
Node 222 :	Char. 77: 0 --> 2	Char. 242: 0 --> 1
All trees:	Char. 79: 0 --> 1	Char. 279: 0 --> 1
Char. 70: 1 --> 0	Char. 114: 1 --> 2	Char. 280: 0 --> 1
Char. 192: 1 --> 0	Char. 245: 1 --> 2	Node 239 :
Char. 245: 1 --> 0	Node 230 :	All trees:
Some trees:	All trees:	Char. 115: 0 --> 1
Char. 59: 0 --> 1	Char. 77: 0 --> 1	Char. 128: 1 --> 2
Char. 174: 2 --> 3	Char. 87: 1 --> 0	Char. 206: 0 --> 1
Node 223 :	Node 231 :	Char. 230: 1 --> 0
All trees:	All trees:	Node 240 :
Char. 53: 0 --> 1	Char. 40: 1 --> 0	All trees:
Node 224 :	Char. 129: 1 --> 2	Char. 230: 1 --> 0
All trees:	Node 232 :	Node 241 :
Char. 140: 1 --> 0	All trees:	All trees:
Node 225 :	Char. 11: 0 --> 1	Char. 234: 1 --> 0
All trees:	Char. 34: 0 --> 1	
Char. 88: 0 --> 1	Char. 35: 0 --> 1	
Node 226 :	Char. 58: 0 --> 1	
All trees:	Some trees:	
Char. 90: 0 --> 1	Char. 70: 12 --> 0	
Node 227 :	Node 233 :	
All trees:	All trees:	
Char. 54: 1 --> 0	Char. 234: 1 --> 0	
Char. 55: 1 --> 2	Some trees:	
Char. 69: 0 --> 1	Char. 217: 1 --> 0	
Char. 74: 1 --> 2	Char. 231: 1 --> 0	
	Char. 233: 1 --> 0	
	Node 234 :	
	All trees:	

### **Implied Weighted Analysis**

Proganochelys\_quenstedti :

All trees:

No autapomorphies:

Platychelys\_oberndorferi :

All trees:

Char. 179: 0 --> 1

Char. 193: 0 --> 1

Char. 201: 0 --> 2

Notoemys\_laticentralis :

All trees:

Char. 201: 0 --> 1	Myuchelys_latisternum :	Char. 176: 0 --> 1
Char. 206: 0 --> 1	All trees:	Char. 177: 0 --> 3
Char. 207: 0 --> 1	Char. 3: 0 --> 1	Char. 181: 1 --> 2
Char. 209: 1 --> 0	Char. 8: 0 --> 1	
	Char. 70: 1 --> 0	Chelodina_colliei :
	Char. 129: 0 --> 2	All trees:
Bonapartemys_bajobarrealis :	Char. 191: 1 --> 0	Char. 38: 0 --> 1
All trees:	Char. 192: 1 --> 0	Char. 61: 0 --> 1
Char. 191: 0 --> 1	Char. 218: 1 --> 0	Char. 67: 0 --> 1
Char. 194: 1 --> 2		Char. 98: 2 --> 1
Char. 208: 0 --> 1	Acanthochelys_radiolata :	Char. 117: 1 --> 0
Char. 212: 1 --> 0	All trees:	Char. 172: 0 --> 1
Char. 224: 0 --> 1	Char. 5: 0 --> 1	Char. 174: 23 --> 5
	Char. 98: 2 --> 1	Char. 176: 0 --> 1
	Char. 164: 0 --> 2	Char. 180: 1 --> 0
Prochelidella_cerrobarcinae :	Char. 195: 0 --> 1	Char. 181: 1 --> 0
All trees:	Char. 223: 0 --> 1	Char. 183: 1 --> 0
Char. 182: 1 --> 2		Char. 194: 1 --> 0
Char. 199: 0 --> 1	Platemys_platycephala :	Char. 195: 0 --> 1
Char. 209: 0 --> 1	All trees:	Char. 200: 1 --> 0
	Char. 9: 1 --> 0	Char. 208: 0 --> 1
Pseudemysdura_umbrina :	Char. 18: 2 --> 1	Char. 210: 1 --> 0
All trees:	Char. 19: 3 --> 0	Char. 211: 1 --> 0
Char. 9: 1 --> 0	Char. 34: 2 --> 0	Char. 212: 1 --> 0
Char. 17: 1 --> 0	Char. 46: 0 --> 1	Char. 213: 0 --> 1
Char. 81: 2 --> 0	Char. 50: 2 --> 0	Char. 214: 1 --> 0
Char. 102: 1 --> 2	Char. 65: 0 --> 1	Char. 223: 0 --> 2
Char. 107: 1 --> 0	Char. 66: 0 --> 1	Char. 226: 0 --> 1
Char. 111: 1 --> 2	Char. 153: 0 --> 3	Char. 227: 0 --> 1
Char. 169: 0 --> 1	Char. 157: 0 --> 1	Char. 229: 0 --> 1
Char. 183: 1 --> 0	Char. 158: 1 --> 2	Char. 234: 1 --> 0
Char. 216: 0 --> 1	Char. 170: 1 --> 2	Char. 243: 0 --> 1
Char. 226: 0 --> 1	Char. 179: 0 --> 1	
Char. 227: 0 --> 1	Char. 183: 1 --> 0	Chelus_colombianus :
Char. 229: 0 --> 1	Char. 204: 1 --> 0	All trees:
Char. 235: 0 --> 1	Char. 213: 0 --> 1	Char. 190: 1 --> 2
Char. 275: 0 --> 1		Char. 195: 0 --> 1
		Char. 196: 1 --> 0
Elseya_dentata :	Phrynops_hilarii :	Char. 243: 0 --> 1
All trees:	All trees:	
Char. 47: 0 --> 1	Char. 230: 1 --> 0	Chelus_fimbriatus :
Char. 59: 0 --> 1	Char. 271: 0 --> 1	All trees:
Char. 103: 0 --> 1		Char. 226: 0 --> 1
Char. 128: 1 --> 2	Phrynops_geoffroanus :	Char. 233: 1 --> 0
Char. 208: 0 --> 1	All trees:	
	Char. 192: 2 --> 1	Hydromedusa_tectifera :
Emydura_macquarii :	Char. 272: 0 --> 1	All trees:
All trees:		Char. 172: 0 --> 1
Char. 70: 1 --> 0	Mesoclemmys_nasuta :	Char. 210: 1 --> 0
Char. 189: 0 --> 1	All trees:	Char. 211: 1 --> 0
Char. 192: 1 --> 0	Char. 87: 1 --> 0	Char. 212: 1 --> 0
Char. 221: 1 --> 0	Char. 128: 1 --> 2	Char. 274: 2 --> 1
	Char. 174: 3 --> 4	

	Char. 109: 0 --> 1	
Hydromedusa_maximilliani :	Char. 127: 0 --> 1	Kurmademys_kallamedensis :
All trees:	Char. 142: 1 --> 0	All trees:
Char. 181: 1 --> 0	Char. 175: 1 --> 0	Char. 24: 0 --> 1
Char. 206: 1 --> 0	Char. 183: 1 --> 0	Char. 48: 2 --> 0
Char. 236: 0 --> 1	Char. 206: 1 --> 0	Char. 84: 0 --> 1
		Char. 98: 1 --> 0
Yaminuechelys_maior :	Euraxemys_essweini :	Char. 100: 01 --> 2
All trees:	All trees:	Char. 173: 1 --> 2
Char. 158: 2 --> 3	Char. 46: 1 --> 0	Char. 174: 2 --> 3
Char. 236: 0 --> 1	Char. 100: 1 --> 0	Char. 181: 1 --> 2
		Char. 219: 0 --> 2
Yaminuechelys_gasparinii :	Dirqadim_schaefferi :	Char. 227: 0 --> 1
All trees:	All trees:	Char. 277: 0 --> 1
Char. 219: 1 --> 0	Char. 17: 2 --> 1	
Char. 244: 1 --> 0	Char. 23: 1 --> 0	Sankuchemys_sethnai :
	Char. 48: 2 --> 0	All trees:
Pelusios_castaneus :	Char. 98: 1 --> 2	Char. 59: 0 --> 1
All trees:		Char. 66: 0 --> 1
Char. 43: 0 --> 1	Sokatra_antitra :	
Char. 103: 0 --> 1	All trees:	Kinkonychelys_rogersi :
	Char. 13: 1 --> 0	All trees:
Pelusios_sinuatus :	Char. 39: 0 --> 1	No autapomorphies:
All trees:	Char. 59: 0 --> 1	
Char. 46: 1 --> 0	Char. 88: 1 --> 0	Foxemys_mechinorum :
Char. 173: 1 --> 2	Char. 277: 0 --> 1	All trees:
		Char. 219: 2 --> 0
Pelomedusa_subrufa :	Atolchelys_lepida :	
All trees:	All trees:	Foxemys_trabanti :
Char. 139: 0 --> 1	Char. 53: 0 --> 1	All trees:
Char. 170: 1 --> 2	Char. 66: 0 --> 1	No autapomorphies:
Char. 180: 0 --> 1	Char. 70: 1 --> 0	
Char. 207: 0 --> 1	Char. 98: 1 --> 2	Polysternon_provinciale :
Char. 245: 1 --> 2	Char. 216: 0 --> 1	All trees:
Char. 272: 0 --> 1	Char. 236: 0 --> 1	Char. 110: 0 --> 1
Char. 273: 1 --> 0		Char. 169: 0 --> 1
	Cearachelys_placidoi :	Char. 216: 1 --> 0
Araripemys_barretoii :	All trees:	
All trees:	Char. 69: 1 --> 0	Araiochelys_hirayamai :
Char. 64: 0 --> 1	Char. 81: 1 --> 02	All trees:
Char. 140: 1 --> 0	Char. 82: 1 --> 0	Char. 4: 1 --> 0
Char. 143: 0 --> 1		Char. 9: 2 --> 1
Char. 190: 1 --> 0	Galianemys_emringeri :	Char. 102: 0 --> 1
Char. 193: 1 --> 0	All trees:	Char. 141: 2 --> 0
Char. 207: 0 --> 2	Char. 246: 1 --> 0	Char. 173: 1 --> 2
Char. 209: 0 --> 1	Char. 247: 1 --> 0	Char. 175: 1 --> 2
Char. 224: 1 --> 2	Char. 264: 0 --> 1	Char. 201: 0 --> 1
		Char. 228: 0 --> 1
Laganemys_tenerensis :	Galianemys_whitei :	Char. 255: 0 --> 1
All trees:	All trees:	
Char. 18: 23 --> 1	Char. 255: 0 --> 1	Zolhafah_bella :
Char. 23: 1 --> 0		All trees:

Char. 32: 1 --> 0	All trees:	Brasilemys_josai :
Char. 44: 0 --> 1	Char. 33: 0 --> 1	All trees:
Char. 55: 2 --> 1	Char. 53: 0 --> 1	Char. 80: 2 --> 1
Char. 57: 0 --> 1	Char. 59: 0 --> 1	Char. 81: 2 --> 0
Char. 106: 1 --> 0	Char. 60: 0 --> 1	Char. 108: 0 --> 1
Char. 114: 1 --> 2	Char. 77: 01 --> 2	Char. 174: 2 --> 1
Rosasia_soutoi :	Char. 88: 0 --> 1	
All trees:	Char. 94: 2 --> 0	
Char. 181: 12 --> 0	Char. 109: 1 --> 0	Hamadachelys_escuilliei :
Char. 201: 0 --> 1	Azabbaremys_moragjonesi :	All trees:
	All trees:	Char. 147: 0 --> 1
Bothremys_maghrebiana :	Char. 43: 1 --> 0	Char. 251: 1 --> 0
All trees:	Char. 45: 0 --> 1	Char. 255: 0 --> 1
Char. 32: 1 --> 0	Char. 85: 0 --> 3	
Char. 110: 0 --> 1	Char. 110: 1 --> 0	Portezueloemys_patagonica :
		All trees:
Bothremys_cooki :	Labrostocheles_galkini :	Char. 27: 0 --> 1
All trees:	All trees:	Char. 173: 1 --> 2
No autapomorphies:	Char. 6: 0 --> 1	Char. 207: 0 --> 2
	Char. 44: 0 --> 1	
Bothremys_arabicus :	Char. 51: 01 --> 2	Bauruemys_elegans :
All trees:	Char. 73: 1 --> 0	All trees:
No autapomorphies:	Char. 85: 0 --> 1	Char. 157: 0 --> 1
	Char. 100: 1 --> 2	Char. 173: 1 --> 2
Bothremys_kellyi :	Char. 246: 1 --> 0	Char. 177: 0 --> 1
All trees:	Char. 248: 1 --> 0	Char. 265: 0 --> 1
Char. 32: 1 --> 0		
Char. 98: 2 --> 1	Phosphatochelys_tedfordi :	Cambaremys_langertoni :
	All trees:	All trees:
Chedighaii_hutchisoni :	Char. 24: 0 --> 1	Char. 170: 1 --> 2
All trees:	Char. 271: 0 --> 1	
No autapomorphies:	Char. 274: 0 --> 2	Peiropemys_mezzalirai :
		All trees:
Chedighaii_barberi :	Ummulisani_rutgersensis :	Char. 54: 1 --> 0
All trees:	All trees:	
Char. 55: 2 --> 1	Char. 85: 0 --> 3	Lapparentemys_vilavilensis :
	Char. 100: 1 --> 2	All trees:
Taphrosphys_sulcatus :	Char. 102: 0 --> 1	No autapomorphies:
All trees:	Char. 245: 1 --> 2	
Char. 102: 0 --> 1		Pricemys_caiera :
Char. 114: 1 --> 0	Rhothonemys_brinkmani :	All trees:
	All trees:	Char. 26: 0 --> 2
Taphrosphys_ippolitoi :	No autapomorphies:	Char. 28: 0 --> 1
All trees:		
No autapomorphies:	Arenila_krebsi :	Cerrejonemys_wayuunaiki :
	All trees:	All trees:
Taphrosphys_congolensis :	No autapomorphies:	Char. 64: 0 --> 1
All trees:		Char. 134: 0 --> 1
No autapomorphies:	Nigeremys_gigantea :	Podocnemis_vogli :
	All trees:	All trees:
Acleistocheles_maliensis :	Char. 70: 1 --> 0	Char. 174: 2 --> 1

Char. 236: 0 --> 1	Char. 137: 0 --> 1	Char. 167: 0 --> 1
Podocnemis_lewyana :	Some trees:	Char. 185: 0 --> 1
All trees:	Char. 45: 0 --> 1	Neochelys_arenarum :
No autapomorphies:	UCMP_42008 :	All trees:
Podocnemis_unifilis :	All trees:	Char. 70: 1 --> 0
All trees:	Char. 1: 0 --> 1	Neochelys_franzeni :
Char. 171: 1 --> 0	Char. 31: 0 --> 1	All trees:
Char. 274: 0 --> 2	Char. 86: 0 --> 1	Char. 147: 1 --> 0
	Char. 107: 1 --> 0	Char. 228: 1 --> 0
Podocnemis_erythrocephala :	Carbonemys_cofrinii :	Papoulemys_laurenti :
All trees:	All trees:	All trees:
Char. 160: 0 --> 1	Char. 87: 1 --> 0	Char. 173: 2 --> 1
Char. 170: 1 --> 2	Char. 245: 1 --> 2	Char. 219: 2 --> 0
Char. 171: 1 --> 0	Peltocephalus_dumerilianus :	Mogharemys_blackenhorni :
Char. 181: 2 --> 1	All trees:	All trees:
Char. 207: 1 --> 2	Char. 31: 0 --> 1	Char. 53: 0 --> 1
Char. 219: 0 --> 2	Char. 48: 2 --> 0	Char. 113: 0 --> 1
Podocnemis_expansa :	Char. 105: 1 --> 0	Char. 117: 1 --> 0
All trees:	Char. 227: 1 --> 0	Brontochelys_gaffneyi :
Char. 77: 0 --> 1	Char. 245: 1 --> 0	All trees:
Char. 207: 1 --> 2	Some trees:	No autapomorphies:
Char. 221: 0 --> 1	Char. 59: 0 --> 1	Lemurchelys_diasphax :
Podocnemis_sextuberculata :	Kenyemys_williamsi :	All trees:
All trees:	All trees:	Char. 110: 1 --> 0
No autapomorphies:	Char. 169: 0 --> 1	Shweboemys_pilgrimi :
Podocnemis_bassleri :	Char. 172: 0 --> 1	All trees:
All trees:	Char. 178: 0 --> 1	No autapomorphies:
Char. 51: 1 --> 0	Char. 200: 1 --> 0	Stereogenys_cromeri :
Char. 52: 0 --> 1	Char. 210: 0 --> 1	All trees:
Caninemys_tridentata :	Turkanemys_pattersoni :	Char. 42: 1 --> 0
All trees:	All trees:	Char. 129: 1 --> 2
Char. 26: 0 --> 1	Char. 137: 0 --> 1	Cordichelys_antiqua :
Char. 28: 0 --> 1	Char. 171: 1 --> 0	All trees:
Char. 52: 0 --> 1	Char. 189: 0 --> 1	Char. 8: 0 --> 1
Char. 73: 0 --> 1	Char. 241: 2 --> 1	Char. 32: 1 --> 0
Char. 80: 2 --> 0	Erymnochelys_madagascariensis :	Char. 76: 0 --> 1
Char. 85: 1 --> 2	All trees:	Char. 169: 0 --> 1
Char. 87: 1 --> 0	Char. 13: 1 --> 0	Char. 181: 2 --> 1
Stupendemys_geographicus :	Char. 26: 0 --> 1	Char. 182: 1 --> 2
Some trees:	Char. 105: 1 --> 0	Char. 192: 1 --> 0
Char. 204: 0 --> 1	Neochelys_fajumensis :	Char. 205: 0 --> 1
Dacquemys_paleomorpha :	All trees:	Char. 233: 1 --> 0
All trees:	Char. 80: 2 --> 1	

*Latentemys plowdeni* :

All trees:

Char. 40: 1 --> 0

Char. 245: 1 --> 2

*Bairdemys thalassica* :

All trees:

Char. 102: 0 --> 1

*Bairdemys healeyorum* :

All trees:

Char. 180: 0 --> 1

Char. 241: 1 --> 0

*Bairdemys venezuelensis* :

All trees:

No autapomorphies:

*Bairdemys hartsteini* :

All trees:

No autapomorphies:

*Bairdemys sanchezi* :

All trees:

Char. 17: 1 --> 2

Char. 58: 1 --> 0

Char. 110: 1 --> 0

Char. 128: 2 --> 1

Char. 277: 0 --> 1

*Bairdemys winklerae* :

All trees:

No autapomorphies:

*Piramys auffenbergi* :

All trees:

Char. 8: 0 --> 1

Char. 119: 0 --> 1

*Amabilis uchoensis* :

All trees:

Char. 70: 1 --> 0

Char. 122: 1 --> 0

Char. 264: 2 --> 1

*Yuramirim montealtensis* :

All trees:

Char. 85: 1 --> 0

Char. 116: 1 --> 0

Char. 128: 2 --> 1

*Tartaruscola teodorii* :

All trees:

Char. 1: 0 --> 1

Char. 13: 0 --> 1

Char. 17: 2 --> 1

Char. 42: 0 --> 1

Char. 43: 1 --> 0

Char. 46: 0 --> 1

Char. 48: 2 --> 1

Char. 51: 0 --> 1

Char. 57: 0 --> 1

Char. 59: 0 --> 1

Char. 65: 1 --> 0

Char. 81: 1 --> 0

Char. 87: 0 --> 1

Char. 102: 0 --> 1

Char. 110: 0 --> 1

*Chupacabrachelys complexus* :

All trees:

Char. 18: 1 --> 0

Char. 52: 0 --> 1

Char. 56: 0 --> 1

Char. 63: 1 --> 0

Char. 169: 0 --> 1

Char. 170: 1 --> 0

Char. 173: 1 --> 2

Char. 174: 2 --> 3

Char. 184: 1 --> 0

Char. 222: 1 --> 2

*Eocnochelus eremberti* :

All trees:

Char. 9: 0 --> 1

Char. 15: 0 --> 1

Char. 27: 0 --> 1

Char. 42: 0 --> 1

Char. 52: 0 --> 1

Char. 201: 1 --> 0

*Paiutemys tibert* :

All trees:

Char. 200: 1 --> 0

Char. 216: 1 --> 0

Char. 233: 1 --> 0

*Algorachelus peregrinus* :

All trees:

Char. 92: 1 --> 0

Char. 216: 1 --> 0

*Palemys bowerbankii* :

All trees:

Char. 180: 1 --> 0

Char. 181: 1 --> 2

Char. 202: 1 --> 0

*Puentemys mushaisaensis* :

All trees:

Char. 113: 2 --> 1

Char. 129: 1 --> 2

Char. 170: 1 --> 2

Char. 204: 0 --> 1

Char. 207: 1 --> 0

Char. 233: 1 --> 0

*Elochelys perfecta* :

All trees:

Char. 206: 1 --> 0

Char. 229: 0 --> 1

Char. 276: 0 --> 1

*Hydromedusa casamayorensis* :

All trees:

Char. 125: 1 --> 0

Char. 183: 1 --> 0

Char. 193: 0 --> 1

Char. 202: 1 --> 0

Char. 214: 1 --> 0

Char. 215: 0 --> 1

Char. 233: 1 --> 0

*Platycheloides nyasae* :

All trees:

Char. 173: 1 --> 2

Char. 177: 2 --> 3

Char. 192: 1 --> 0

*Teneremys lapparenti* :

All trees:

Char. 215: 0 --> 1

*Mendozachelys wichmanni* :

All trees:

Char. 182: 1 --> 0

Char. 195: 0 --> 1

Char. 216: 0 --> 1

Char. 219: 0 --> 1

*Rionegrochelys caldieroi* :

All trees:

Char. 193: 0 --> 1	Char. 168: 0 --> 1	Char. 54: 1 --> 0
Char. 226: 0 --> 1		Char. 80: 2 --> 1
Char. 233: 1 --> 0	Palaeophrynopos_patagonicus	Char. 94: 3 --> 2
Lomalatachelys_neuquina :	:	Char. 98: 1 --> 2
All trees:	All trees:	Char. 114: 1 --> 0
Char. 173: 2 --> 1	Char. 181: 1 --> 2	Char. 127: 0 --> 1
Char. 180: 0 --> 1	Char. 222: 1 --> 2	Char. 129: 1 --> 2
Char. 183: 1 --> 0	Salamanchelys_palaeocenica	Char. 169: 0 --> 1
Dortoka_vasconica :	:	Char. 182: 1 --> 0
All trees:	All trees:	Char. 185: 0 --> 1
Char. 170: 1 --> 2	Char. 177: 0 --> 1	Char. 193: 1 --> 0
Char. 190: 1 --> 2	Char. 201: 0 --> 2	Char. 200: 1 --> 0
Char. 210: 1 --> 0	Char. 219: 2 --> 0	Char. 205: 0 --> 1
Char. 222: 1 --> 2	Char. 223: 0 --> 2	Char. 216: 0 --> 1
Char. 241: 2 --> 0	Char. 224: 2 --> 1	Char. 217: 1 --> 0
Char. 278: 0 --> 1	Char. 240: 1 --> 0	Char. 229: 0 --> 1
	Char. 241: 1 --> 0	Char. 231: 0 --> 1
Dortoka_botanica :	Podocnemis_pritchardi :	Char. 234: 1 --> 0
All trees:	All trees:	Char. 241: 1 --> 0
Char. 182: 1 --> 2	Char. 180: 0 --> 1	Char. 263: 0 --> 1
Char. 184: 0 --> 1	Char. 224: 1 --> 0	Char. 265: 0 --> 1
Char. 208: 0 --> 1	Char. 244: 0 --> 1	Char. 266: 0 --> 1
Char. 226: 0 --> 1		Char. 268: 0 --> 1
Char. 230: 1 --> 0	Podocnemis_negrii :	Char. 281: 2 --> 0
Birlimarr_gaffneyi :	All trees:	Node 134 :
All trees:	Char. 178: 0 --> 1	All trees:
Char. 125: 1 --> 0	Podocnemis_medemi :	Char. 187: 0 --> 1
Char. 180: 0 --> 1	All trees:	Char. 205: 0 --> 1
Char. 218: 1 --> 0	Char. 181: 2 --> 1	Char. 225: 1 --> 0
Char. 226: 0 --> 1	Char. 207: 1 --> 0	Char. 283: 0 --> 1
Notoemys_zapatocaensis :	Char. 219: 0 --> 2	Node 135 :
All trees:	Char. 231: 0 --> 1	All trees:
Char. 170: 0 --> 1	Ilartardia_cetiotesta :	No synapomorphies
Char. 210: 1 --> 0	All trees:	Node 136 :
Char. 214: 0 --> 1	Char. 4: 0 --> 1	All trees:
Char. 229: 0 --> 1	Char. 22: 0 --> 1	Char. 194: 1 --> 2
Char. 230: 1 --> 0	Char. 50: 0 --> 1	Char. 195: 0 --> 1
Elusor_macrurus :	Char. 74: 0 --> 1	Char. 200: 1 --> 0
All trees:	Char. 85: 0 --> 2	Char. 284: 0 --> 1
Char. 39: 1 --> 0	Char. 264: 0 --> 1	Node 137 :
Char. 92: 0 --> 1	Gestemys_powelli :	All trees:
Char. 210: 1 --> 0	All trees:	Char. 180: 1 --> 0
Char. 219: 2 --> 0	Char. 171: 1 --> 0	Char. 195: 0 --> 1
Char. 235: 0 --> 1	Char. 173: 1 --> 2	Char. 210: 1 --> 0
Linderochelys_rinconensis :	Char. 174: 2 --> 3	Char. 235: 0 --> 1
All trees:	Char. 181: 2 --> 1	Node 138 :
	Some trees:	All trees:

Char. 169: 0 --> 1	Node 145 :	Node 152 :
Char. 185: 1 --> 0	All trees:	All trees:
Char. 219: 2 --> 1	Char. 88: 0 --> 1	Char. 43: 0 --> 1
Node 139 :	Char. 234: 0 --> 1	Char. 54: 0 --> 1
All trees:	Char. 241: 2 --> 1	Char. 121: 0 --> 1
Char. 181: 1 --> 2	Node 146 :	Char. 195: 0 --> 1
Char. 224: 2 --> 0	All trees:	Char. 197: 0 --> 1
Char. 238: 0 --> 1	Char. 98: 1 --> 2	Char. 204: 0 --> 1
Char. 244: 0 --> 1	Char. 140: 1 --> 0	Char. 269: 0 --> 1
Node 140 :	Char. 202: 1 --> 0	Node 153 :
All trees:	Node 147 :	All trees:
Char. 72: 0 --> 1	All trees:	Char. 101: 0 --> 1
Char. 107: 1 --> 0	Char. 49: 0 --> 1	Char. 194: 1 --> 2
Char. 157: 0 --> 1	Char. 67: 1 --> 0	Node 154 :
Char. 174: 23 --> 1	Char. 125: 0 --> 1	All trees:
Node 141 :	Char. 266: 1 --> 0	Char. 99: 0 --> 1
All trees:	Node 148 :	Char. 196: 1 --> 0
Char. 9: 1 --> 2	All trees:	Char. 210: 1 --> 0
Char. 19: 3 --> 2	Char. 173: 2 --> 4	Char. 240: 1 --> 0
Char. 150: 0 --> 1	Char. 206: 1 --> 0	Node 155 :
Char. 168: 0 --> 1	Node 149 :	All trees:
Char. 264: 2 --> 1	All trees:	Char. 219: 2 --> 1
Node 142 :	Char. 54: 1 --> 0	Char. 236: 0 --> 1
All trees:	Char. 159: 1 --> 0	Node 156 :
Char. 0: 0 --> 2	Char. 173: 1 --> 2	All trees:
Char. 42: 0 --> 1	Char. 191: 0 --> 1	Char. 4: 0 --> 1
Char. 128: 1 --> 0	Char. 196: 0 --> 1	Char. 152: 0 --> 1
Char. 149: 0 --> 1	Char. 276: 0 --> 1	Char. 173: 4 --> 3
Char. 152: 0 --> 2	Char. 282: 0 --> 1	Char. 269: 0 --> 1
Char. 161: 0 --> 1	Node 150 :	Node 157 :
Char. 162: 0 --> 1	All trees:	All trees:
Char. 173: 4 --> 12	Char. 173: 0 --> 1	Char. 175: 1 --> 0
Char. 199: 1 --> 0	Char. 174: 0 --> 2	Char. 178: 0 --> 1
Char. 252: 0 --> 1	Char. 175: 0 --> 1	Char. 179: 0 --> 1
Node 143 :	Char. 209: 1 --> 0	Char. 193: 0 --> 2
All trees:	Char. 233: 0 --> 1	Char. 219: 2 --> 1
Char. 192: 1 --> 2	Char. 238: 1 --> 0	Char. 244: 0 --> 1
Char. 202: 0 --> 1	Char. 281: 1 --> 2	Node 158 :
Char. 204: 0 --> 1	Node 151 :	All trees:
Char. 206: 0 --> 1	All trees:	Char. 171: 1 --> 0
Node 144 :	Char. 163: 0 --> 1	Char. 175: 1 --> 0
All trees:	Char. 170: 0 --> 1	Char. 177: 0 --> 1
Char. 180: 0 --> 1	Char. 186: 0 --> 1	Char. 190: 1 --> 0
Char. 205: 0 --> 1	Char. 202: 0 --> 1	Char. 192: 12 --> 3
Char. 218: 1 --> 0	Char. 206: 0 --> 1	Char. 205: 1 --> 0
		Char. 235: 0 --> 1



Node 159 :	Node 164 :	Char. 129: 0 --> 1
All trees:	All trees:	Node 170 :
Char. 164: 0 --> 1	Char. 9: 1 --> 2	All trees:
Char. 198: 0 --> 1	Char. 98: 1 --> 2	Char. 92: 0 --> 1
Node 160 :	Char. 182: 1 --> 0	Char. 93: 0 --> 1
All trees:	Char. 184: 1 --> 0	Char. 94: 1 --> 2
Char. 170: 1 --> 0	Char. 205: 0 --> 1	Char. 100: 2 --> 01
Char. 181: 2 --> 1	Char. 214: 1 --> 0	Node 171 :
Char. 207: 0 --> 1	Char. 222: 1 --> 0	All trees:
Char. 225: 1 --> 0	Char. 223: 0 --> 2	Char. 30: 0 --> 1
Node 161 :	Char. 225: 1 --> 0	Char. 122: 1 --> 0
All trees:	Char. 230: 1 --> 2	Char. 123: 0 --> 1
Char. 59: 0 --> 1	Char. 276: 0 --> 1	Node 172 :
Char. 206: 1 --> 0	Node 165 :	All trees:
Node 162 :	All trees:	Char. 80: 2 --> 0
All trees:	Char. 0: 1 --> 2	Char. 119: 0 --> 1
Char. 18: 2 --> 3	Char. 128: 1 --> 0	Node 173 :
Char. 19: 0 --> 2	Char. 169: 0 --> 1	All trees:
Char. 48: 2 --> 0	Char. 170: 1 --> 02	Char. 87: 1 --> 0
Char. 64: 0 --> 1	Char. 171: 1 --> 2	Char. 109: 0 --> 1
Char. 98: 1 --> 2	Char. 177: 0 --> 2	Node 174 :
Char. 109: 0 --> 1	Char. 200: 1 --> 2	All trees:
Char. 129: 0 --> 2	Node 166 :	Char. 62: 0 --> 1
Char. 134: 0 --> 1	All trees:	Node 175 :
Char. 167: 0 --> 1	Char. 13: 1 --> 2	All trees:
Char. 190: 1 --> 0	Char. 81: 2 --> 0	Char. 19: 0 --> 1
Char. 236: 0 --> 1	Char. 139: 0 --> 1	Char. 113: 1 --> 2
Char. 274: 0 --> 2	Char. 174: 2 --> 01	Node 176 :
Node 163 :	Node 167 :	All trees:
All trees:	All trees:	Char. 56: 0 --> 1
Char. 0: 0 --> 1	Char. 111: 1 --> 2	Char. 74: 0 --> 1
Char. 2: 0 --> 1	Char. 117: 1 --> 0	Char. 91: 0 --> 1
Char. 5: 0 --> 1	Char. 162: 0 --> 1	Char. 118: 1 --> 2
Char. 17: 1 --> 2	Char. 193: 0 --> 1	Char. 128: 1 --> 2
Char. 18: 0 --> 2	Char. 250: 1 --> 0	Node 177 :
Char. 23: 0 --> 1	Node 168 :	All trees:
Char. 46: 0 --> 1	All trees:	Char. 84: 0 --> 1
Char. 88: 0 --> 1	Char. 18: 2 --> 1	Char. 109: 1 --> 0
Char. 96: 0 --> 1	Char. 59: 0 --> 1	Char. 127: 0 --> 1
Char. 132: 0 --> 1	Char. 80: 2 --> 1	Node 178 :
Char. 148: 1 --> 2	Char. 100: 2 --> 1	All trees:
Char. 197: 0 --> 1	Char. 108: 0 --> 1	Char. 223: 0 --> 1
Char. 210: 1 --> 0	Char. 127: 0 --> 1	
Char. 234: 0 --> 1	Char. 128: 1 --> 2	
Char. 241: 2 --> 1	Node 169 :	
Char. 247: 0 --> 1	All trees:	
Char. 261: 0 --> 1		

Node 179 :	All trees:	Char. 97: 0 --> 1
All trees:	Char. 33: 0 --> 1	Char. 255: 0 --> 1
Char. 231: 0 --> 1	Char. 60: 0 --> 1	Char. 264: 0 --> 2
	Char. 74: 1 --> 2	Char. 269: 0 --> 1
Node 180 :		
All trees:	Node 188 :	Node 198 :
Char. 228: 0 --> 1	All trees:	All trees:
	Char. 55: 1 --> 2	Char. 15: 1 --> 0
Node 181 :	Char. 56: 1 --> 2	Char. 19: 1 --> 0
All trees:	Char. 263: 0 --> 1	Char. 53: 0 --> 1
Char. 53: 0 --> 1		Char. 93: 1 --> 0
Char. 82: 1 --> 0		
Char. 227: 0 --> 1		
Node 182 :	Node 189 :	Node 199 :
All trees:	All trees:	All trees:
Char. 4: 0 --> 1	Char. 206: 1 --> 0	Char. 1: 0 --> 1
Char. 12: 0 --> 1	Char. 226: 1 --> 0	Char. 9: 0 --> 1
Char. 143: 0 --> 1		Char. 35: 0 --> 1
Char. 215: 0 --> 1		Char. 36: 0 --> 1
	Node 190 :	
	All trees:	
	Char. 50: 0 --> 1	
	Node 191 :	Node 200 :
Node 183 :	All trees:	All trees:
All trees:	Char. 51: 1 --> 2	Char. 29: 0 --> 1
Char. 86: 0 --> 1		
Char. 120: 0 --> 1		
Char. 133: 0 --> 1		
Char. 145: 0 --> 1		
Char. 216: 0 --> 1		
Char. 249: 1 --> 0		
Char. 251: 1 --> 0		
Char. 267: 1 --> 0		
	Node 192 :	Node 201 :
Node 184 :	All trees:	All trees:
All trees:	Char. 44: 0 --> 1	Char. 98: 1 --> 2
Char. 1: 0 --> 1	Char. 114: 1 --> 2	Char. 100: 0 --> 1
Char. 6: 0 --> 1		Char. 101: 0 --> 1
Char. 42: 0 --> 1		Char. 106: 1 --> 0
Char. 51: 0 --> 1		Char. 263: 0 --> 1
Char. 98: 1 --> 2		
	Node 193 :	Node 202 :
Node 185 :	All trees:	All trees:
All trees:	Char. 44: 0 --> 1	Char. 9: 1 --> 0
Char. 93: 1 --> 0	Char. 114: 1 --> 2	Char. 38: 0 --> 1
Char. 100: 0 --> 1		Char. 42: 0 --> 1
Char. 101: 0 --> 1		Char. 46: 0 --> 1
	Node 194 :	Char. 66: 0 --> 1
	All trees:	
	Char. 33: 1 --> 0	
	Char. 60: 1 --> 0	
	Node 195 :	Node 203 :
	All trees:	All trees:
	Char. 131: 0 --> 1	Char. 51: 0 --> 1
		Char. 55: 1 --> 0
		Char. 56: 1 --> 0
		Char. 73: 0 --> 1
		Char. 74: 1 --> 0
		Char. 92: 1 --> 0
		Char. 110: 0 --> 1
		Char. 129: 1 --> 2
	Node 196 :	
	All trees:	
	Char. 98: 2 --> 1	
	Node 197 :	
	All trees:	
	Char. 41: 0 --> 1	
Node 187 :		Node 204 :
		All trees:

Char. 7: 0 --> 1	All trees:	All trees:
Node 205 :	Char. 16: 0 --> 1	Char. 219: 0 --> 2
All trees:	Char. 18: 2 --> 0	Node 224 :
Char. 21: 0 --> 1	Char. 105: 0 --> 1	All trees:
Char. 29: 1 --> 0	Char. 115: 0 --> 1	Char. 48: 2 --> 1
Char. 52: 0 --> 1	Char. 156: 0 --> 1	Char. 95: 0 --> 1
Node 206 :	Char. 165: 2 --> 1	Char. 236: 0 --> 1
All trees:	Char. 250: 0 --> 1	Node 225 :
Char. 54: 1 --> 0	Char. 252: 0 --> 1	All trees:
Char. 85: 0 --> 3	Node 216 :	Char. 46: 0 --> 1
Char. 87: 0 --> 2	All trees:	Node 226 :
Node 207 :	Char. 80: 2 --> 1	All trees:
All trees:	Node 217 :	Char. 28: 0 --> 1
Char. 155: 1 --> 0	All trees:	Char. 45: 0 --> 1
Char. 206: 1 --> 0	Char. 22: 0 --> 1	Char. 200: 1 --> 0
Char. 264: 0 --> 2	Char. 39: 0 --> 1	Char. 216: 0 --> 1
Node 208 :	Node 218 :	Node 227 :
All trees:	All trees:	All trees:
Char. 96: 1 --> 0	Char. 55: 0 --> 1	Char. 116: 1 --> 0
Char. 116: 0 --> 1	Char. 56: 1 --> 0	Node 228 :
Char. 117: 0 --> 1	Char. 57: 0 --> 1	All trees:
Node 209 :	Char. 95: 0 --> 1	Char. 184: 0 --> 1
All trees:	Char. 144: 0 --> 1	Node 229 :
Char. 85: 0 --> 1	Char. 191: 0 --> 1	All trees:
Char. 113: 1 --> 0	Char. 206: 0 --> 1	Char. 13: 0 --> 1
Node 210 :	Node 219 :	Char. 232: 0 --> 1
All trees:	All trees:	Char. 241: 1 --> 2
Char. 17: 2 --> 1	Char. 208: 0 --> 1	Node 230 :
Node 211 :	Node 220 :	All trees:
All trees:	All trees:	Char. 230: 1 --> 0
Char. 238: 0 --> 1	Char. 95: 1 --> 0	Node 231 :
Node 212 :	Char. 182: 1 --> 0	All trees:
All trees:	Char. 200: 1 --> 0	Char. 173: 1 --> 2
Char. 227: 0 --> 1	Char. 221: 1 --> 0	Node 232 :
Node 213 :	Node 221 :	All trees:
All trees:	All trees:	Char. 219: 0 --> 2
Char. 70: 1 --> 0	Char. 8: 0 --> 1	Char. 233: 1 --> 0
Node 214 :	Char. 137: 0 --> 1	Node 233 :
All trees:	Node 222 :	All trees:
Char. 13: 1 --> 2	All trees:	Char. 59: 0 --> 1
Node 215 :	Char. 26: 0 --> 1	Char. 70: 1 --> 0
Node 223 :	Char. 54: 1 --> 0	Char. 192: 1 --> 0
	Char. 64: 0 --> 1	

Char. 245: 1 --> 0

Node 234 :  
All trees:  
Char. 26: 3 --> 0

Node 235 :  
All trees:  
Char. 73: 0 --> 1  
Char. 78: 0 --> 1  
Char. 110: 0 --> 1

Node 236 :  
All trees:  
Char. 53: 0 --> 1

Node 237 :  
All trees:  
Char. 140: 1 --> 0

Node 238 :  
All trees:  
Char. 88: 0 --> 1

Node 239 :  
All trees:  
Char. 90: 0 --> 1

Node 240 :  
All trees:  
Char. 54: 1 --> 0  
Char. 55: 1 --> 2  
Char. 69: 0 --> 1  
Char. 74: 1 --> 2  
Char. 75: 0 --> 1  
Char. 89: 0 --> 1  
Char. 127: 0 --> 1

Node 241 :  
All trees:  
Char. 76: 0 --> 1

Node 242 :  
All trees:  
Char. 32: 1 --> 0  
Char. 77: 0 --> 2  
Char. 79: 0 --> 1  
Char. 114: 1 --> 2  
Char. 245: 1 --> 2

Node 243 :  
All trees:

Char. 77: 0 --> 1  
Char. 87: 1 --> 0

Node 244 :  
All trees:  
Char. 40: 1 --> 0  
Char. 129: 1 --> 2

Node 245 :  
All trees:  
Char. 124: 0 --> 1

Node 246 :  
All trees:  
Char. 11: 0 --> 1  
Char. 34: 0 --> 1  
Char. 35: 0 --> 1  
Char. 58: 0 --> 1  
Char. 70: 12 --> 0

Node 247 :  
All trees:  
Char. 233: 1 --> 0  
Char. 234: 1 --> 0

Node 248 :  
All trees:  
Char. 181: 1 --> 2  
Char. 190: 1 --> 2  
Char. 207: 0 --> 1

Node 249 :  
All trees:  
Char. 204: 0 --> 1

Node 250 :  
All trees:  
Char. 193: 0 --> 1

Node 251 :  
All trees:  
Char. 244: 0 --> 1

Node 252 :  
All trees:  
Char. 180: 0 --> 1  
Char. 185: 0 --> 1  
Char. 242: 0 --> 1  
Char. 279: 0 --> 1  
Char. 280: 0 --> 1

Node 253 :

All trees:  
Char. 115: 0 --> 1  
Char. 128: 1 --> 2  
Char. 206: 0 --> 1  
Char. 230: 1 --> 0

Node 254 :  
All trees:  
Char. 230: 1 --> 0

Node 255 :  
All trees:  
Char. 234: 1 --> 0

**Only skull analysis**

*Proganochelys\_quenstedti* :  
All trees:  
No autapomorphies:

*Platychelys\_oberndorferi* :  
All trees:  
Char. 179: 0 --> 1  
Char. 193: 0 --> 1  
Char. 201: 0 --> 2

*Notoemys\_laticentralis* :  
All trees:  
Char. 201: 0 --> 1  
Char. 206: 0 --> 1  
Char. 207: 0 --> 1  
Char. 209: 1 --> 0

*Bonapartemys\_bajobarrealis* :  
All trees:  
Char. 191: 0 --> 1  
Char. 194: 1 --> 2  
Char. 208: 0 --> 1  
Char. 212: 1 --> 0  
Char. 224: 0 --> 1

*Prochelidella\_cerrobarcinae* :  
All trees:  
Char. 182: 1 --> 2  
Char. 199: 0 --> 1  
Char. 209: 0 --> 1

*Pseudemydura\_umbrina* :  
All trees:  
Char. 9: 1 --> 0  
Char. 17: 1 --> 0  
Char. 81: 2 --> 0

Char. 102: 1 --> 2	Char. 50: 2 --> 0	Char. 214: 1 --> 0
Char. 107: 1 --> 0	Char. 65: 0 --> 1	Char. 223: 0 --> 2
Char. 111: 1 --> 2	Char. 66: 0 --> 1	Char. 226: 0 --> 1
Char. 169: 0 --> 1	Char. 153: 0 --> 3	Char. 227: 0 --> 1
Char. 183: 1 --> 0	Char. 157: 0 --> 1	Char. 229: 0 --> 1
Char. 216: 0 --> 1	Char. 158: 1 --> 2	Char. 234: 1 --> 0
Char. 226: 0 --> 1	Char. 170: 1 --> 2	Char. 243: 0 --> 1
Char. 227: 0 --> 1	Char. 179: 0 --> 1	
Char. 229: 0 --> 1	Char. 183: 1 --> 0	Chelus_colombianus :
Char. 235: 0 --> 1	Char. 204: 1 --> 0	All trees:
Char. 275: 0 --> 1	Char. 213: 0 --> 1	Char. 190: 1 --> 2
		Char. 195: 0 --> 1
Elseya_dentata :	Phrynops_hilarii :	Char. 196: 1 --> 0
All trees:	All trees:	Char. 243: 0 --> 1
Char. 47: 0 --> 1	Char. 230: 1 --> 0	
Char. 59: 0 --> 1	Char. 271: 0 --> 1	Chelus_fimbriatus :
Char. 103: 0 --> 1		All trees:
Char. 128: 1 --> 2	Phrynops_geoffroanus :	Char. 226: 0 --> 1
Char. 208: 0 --> 1	All trees:	Char. 233: 1 --> 0
	Char. 192: 2 --> 1	
Emydura_macquarii :	Char. 272: 0 --> 1	Hydromedusa_tectifera :
All trees:		All trees:
Char. 70: 1 --> 0	Mesoclemmys_nasuta :	Char. 172: 0 --> 1
Char. 189: 0 --> 1	All trees:	Char. 210: 1 --> 0
Char. 192: 1 --> 0	Char. 87: 1 --> 0	Char. 211: 1 --> 0
Char. 221: 1 --> 0	Char. 128: 1 --> 2	Char. 212: 1 --> 0
	Char. 174: 3 --> 4	Char. 274: 2 --> 1
Myuchelys_latisternum :	Char. 176: 0 --> 1	
All trees:	Char. 177: 0 --> 3	Hydromedusa_maximilliani :
Char. 3: 0 --> 1	Char. 181: 1 --> 2	All trees:
Char. 8: 0 --> 1		Char. 181: 1 --> 0
Char. 70: 1 --> 0	Chelodina_colliei :	Char. 206: 1 --> 0
Char. 129: 0 --> 2	All trees:	Char. 236: 0 --> 1
Char. 191: 1 --> 0	Char. 38: 0 --> 1	
Char. 192: 1 --> 0	Char. 61: 0 --> 1	Yaminuechelys_maior :
Char. 218: 1 --> 0	Char. 67: 0 --> 1	All trees:
	Char. 98: 2 --> 1	Char. 158: 2 --> 3
Acanthochelys_radiolata :	Char. 117: 1 --> 0	Char. 236: 0 --> 1
All trees:	Char. 172: 0 --> 1	
Char. 5: 0 --> 1	Char. 174: 23 --> 5	Yaminuechelys_gasparinii :
Char. 98: 2 --> 1	Char. 176: 0 --> 1	All trees:
Char. 164: 0 --> 2	Char. 180: 1 --> 0	Char. 219: 1 --> 0
Char. 195: 0 --> 1	Char. 181: 1 --> 0	Char. 244: 1 --> 0
Char. 223: 0 --> 1	Char. 183: 1 --> 0	
	Char. 194: 1 --> 0	Pelusios_castaneus :
Platemys_platycephala :	Char. 195: 0 --> 1	All trees:
All trees:	Char. 200: 1 --> 0	Char. 43: 0 --> 1
Char. 9: 1 --> 0	Char. 208: 0 --> 1	Char. 103: 0 --> 1
Char. 18: 2 --> 1	Char. 210: 1 --> 0	
Char. 19: 3 --> 0	Char. 211: 1 --> 0	Pelusios_sinuatus :
Char. 34: 2 --> 0	Char. 212: 1 --> 0	All trees:
Char. 46: 0 --> 1	Char. 213: 0 --> 1	Char. 46: 1 --> 0



All trees:	All trees:	Char. 207: 0 --> 2
No autapomorphies:	Char. 6: 0 --> 1	
	Char. 44: 0 --> 1	Bauruemys_elegans :
Bothremys_arabicus :	Char. 51: 01 --> 2	All trees:
All trees:	Char. 73: 1 --> 0	Char. 157: 0 --> 1
No autapomorphies:	Char. 85: 0 --> 1	Char. 173: 1 --> 2
	Char. 100: 1 --> 2	Char. 177: 0 --> 1
Bothremys_kellyi :	Char. 246: 1 --> 0	Char. 265: 0 --> 1
All trees:	Char. 248: 1 --> 0	
Char. 32: 1 --> 0		Cambaremys_langertoni :
Char. 98: 2 --> 1	Phosphatochelys_tedfordi :	All trees:
	All trees:	Char. 170: 1 --> 2
Chedighaii_hutchisoni :	Char. 24: 0 --> 1	
All trees:	Char. 271: 0 --> 1	Peiropemys_mezzalirai :
No autapomorphies:	Char. 274: 0 --> 2	All trees:
		Char. 54: 1 --> 0
Chedighaii_barberi :	Ummulisani_rutgersensis :	Lapparentemys_vilavilensis :
All trees:	All trees:	All trees:
Char. 55: 2 --> 1	Char. 85: 0 --> 3	No autapomorphies:
	Char. 100: 1 --> 2	
Taphrosphys_sulcatus :	Char. 102: 0 --> 1	Pricemys_caiera :
All trees:	Char. 245: 1 --> 2	All trees:
Char. 102: 0 --> 1		Char. 26: 0 --> 2
Char. 114: 1 --> 0	Rhothonemys_brinkmani :	Char. 28: 0 --> 1
	All trees:	
Taphrosphys_ippolitoi :	No autapomorphies:	
All trees:		Cerrejonemys_wayuunaiki :
No autapomorphies:	Arenila_krebsi :	All trees:
	All trees:	Char. 64: 0 --> 1
Taphrosphys_congolensis :	No autapomorphies:	Char. 134: 0 --> 1
All trees:		
No autapomorphies:	Nigeremys_gigantea :	Podocnemis_vogli :
	All trees:	All trees:
Acleistochelys_maliensis :	Char. 70: 1 --> 0	Char. 174: 2 --> 1
All trees:		Char. 236: 0 --> 1
Char. 33: 0 --> 1	Brasilemys_josai :	
Char. 53: 0 --> 1	All trees:	Podocnemis_lewyana :
Char. 59: 0 --> 1	Char. 80: 2 --> 1	Some trees:
Char. 60: 0 --> 1	Char. 81: 2 --> 0	Char. 219: 2 --> 0
Char. 77: 01 --> 2	Char. 108: 0 --> 1	
Char. 88: 0 --> 1	Char. 174: 2 --> 1	Podocnemis_unifilis :
Char. 94: 2 --> 0		All trees:
Char. 109: 1 --> 0	Hamadachelys_escuilliei :	Char. 171: 1 --> 0
	All trees:	Char. 274: 0 --> 2
Azabbaremys_moragjonesi :	Char. 147: 0 --> 1	Some trees:
All trees:	Char. 251: 1 --> 0	Char. 178: 0 --> 1
Char. 43: 1 --> 0	Char. 255: 0 --> 1	
Char. 45: 0 --> 1		Podocnemis_erythrocephala :
Char. 85: 0 --> 3	Portezueloemys_patagonica :	All trees:
Char. 110: 1 --> 0	All trees:	Char. 160: 0 --> 1
	Char. 27: 0 --> 1	Char. 170: 1 --> 2
Labrostocheles_galkini :	Char. 173: 1 --> 2	Char. 171: 1 --> 0

Char. 181: 2 --> 1		Char. 228: 1 --> 0
Char. 207: 1 --> 2	Peltocephalus_dumerilianus :	
Some trees:	All trees:	Papoulemys_laurenti :
Char. 219: 0 --> 2	Char. 31: 0 --> 1	All trees:
	Char. 48: 2 --> 0	Char. 173: 2 --> 1
Podocnemis_expansa :	Char. 105: 1 --> 0	Char. 219: 2 --> 0
All trees:	Char. 207: 0 --> 2	
Char. 77: 0 --> 1	Char. 227: 1 --> 0	Mogharemys_blackenhorni :
Char. 207: 1 --> 2	Char. 245: 1 --> 0	All trees:
Char. 221: 0 --> 1	Some trees:	Char. 53: 0 --> 1
	Char. 59: 0 --> 1	Char. 113: 0 --> 1
Podocnemis_sextuberculata :	Char. 173: 2 --> 1	Char. 117: 1 --> 0
All trees:		
No autapomorphies:	Kenyemys_williamsi :	Brontochelys_gaffneyi :
	All trees:	All trees:
Podocnemis_bassleri :	Char. 169: 0 --> 1	No autapomorphies:
All trees:	Char. 172: 0 --> 1	
Char. 51: 1 --> 0	Char. 178: 0 --> 1	Lemurchelys_diasphax :
Char. 52: 0 --> 1	Char. 200: 1 --> 0	All trees:
	Char. 210: 0 --> 1	Char. 110: 1 --> 0
Caninemys_tridentata :		
All trees:	Turkanemys_pattersoni :	Shweboemys_pilgrimi :
Char. 26: 0 --> 1	All trees:	All trees:
Char. 28: 0 --> 1	Char. 137: 0 --> 1	No autapomorphies:
Char. 52: 0 --> 1	Char. 171: 1 --> 0	
Char. 73: 0 --> 1	Char. 189: 0 --> 1	Stereogenys_cromeri :
Char. 80: 2 --> 0	Char. 241: 2 --> 1	All trees:
Char. 85: 1 --> 2	Some trees:	Char. 42: 1 --> 0
Char. 87: 1 --> 0	Char. 40: 0 --> 1	Char. 129: 1 --> 2
Stupendemys_geographicus :		Cordichelys_antiqua :
All trees:	Erymnochelys_madagascariensis :	All trees:
No autapomorphies:	All trees:	Char. 8: 0 --> 1
	Char. 13: 1 --> 0	Char. 32: 1 --> 0
Dacquemys_paleomorpha :	Char. 26: 0 --> 1	Char. 76: 0 --> 1
All trees:	Char. 105: 1 --> 0	Char. 169: 0 --> 1
Char. 137: 0 --> 1		Char. 181: 2 --> 1
Some trees:	Neochelys_fajumensis :	Char. 182: 1 --> 2
Char. 13: 0 --> 1	All trees:	Char. 192: 1 --> 0
Char. 45: 0 --> 1	Char. 25: 0 --> 1	Char. 205: 0 --> 1
	Char. 80: 2 --> 1	Some trees:
UCMP_42008 :	Char. 167: 0 --> 1	Char. 233: 1 --> 0
All trees:	Char. 185: 0 --> 1	
Char. 1: 0 --> 1		Latentemys_plowdeni :
Char. 31: 0 --> 1	Neochelys_arenarum :	All trees:
Char. 86: 0 --> 1	All trees:	Char. 40: 1 --> 0
Char. 107: 1 --> 0	Char. 70: 1 --> 0	Char. 245: 1 --> 2
Carbonemys_cofrinii :	Neochelys_franzeni :	Bairdemys_thalassica :
All trees:	All trees:	All trees:
Char. 87: 1 --> 0	Char. 147: 1 --> 0	Char. 102: 0 --> 1
Char. 245: 1 --> 2		



Bairdemys_healeyorum :	Char. 48: 2 --> 1	Char. 180: 1 --> 0
All trees:	Char. 51: 0 --> 1	Char. 181: 1 --> 2
Char. 180: 0 --> 1	Char. 57: 0 --> 1	Char. 202: 1 --> 0
Char. 241: 1 --> 0	Char. 59: 0 --> 1	
	Char. 65: 1 --> 0	Puentemys_mushaisaensis :
Bairdemys_venezuelensis :	Char. 81: 1 --> 0	All trees:
All trees:	Char. 87: 0 --> 1	Char. 170: 1 --> 2
No autapomorphies:	Char. 102: 0 --> 1	Char. 207: 1 --> 0
	Char. 110: 0 --> 1	Some trees:
Bairdemys_hartsteini :		Char. 113: 2 --> 1
All trees:		Char. 129: 1 --> 2
No autapomorphies:	Chupacabrachelys_complexus	Char. 204: 0 --> 1
	:	Char. 223: 0 --> 1
Bairdemys_sanchezi :	All trees:	Char. 233: 1 --> 0
All trees:	Char. 18: 1 --> 0	
Char. 17: 1 --> 2	Char. 52: 0 --> 1	Elochelys_perfecta :
Char. 58: 1 --> 0	Char. 56: 0 --> 1	All trees:
Char. 110: 1 --> 0	Char. 63: 1 --> 0	Char. 206: 1 --> 0
Char. 128: 2 --> 1	Char. 169: 0 --> 1	Char. 229: 0 --> 1
Char. 277: 0 --> 1	Char. 170: 1 --> 0	Char. 276: 0 --> 1
Some trees:	Char. 173: 1 --> 2	
Char. 18: 0 --> 1	Char. 174: 2 --> 3	
	Char. 184: 1 --> 0	
Bairdemys_winklerae :	Char. 222: 1 --> 2	Hydromedusa_casamayorensis
Some trees:	Some trees:	:
Char. 18: 0 --> 1	Char. 217: 1 --> 0	All trees:
		Char. 125: 1 --> 0
Piramys_auffenbergi :	Eocenochelus_ereberti :	Char. 183: 1 --> 0
All trees:	All trees:	Char. 193: 0 --> 1
Char. 8: 0 --> 1	Char. 15: 0 --> 1	Char. 202: 1 --> 0
Char. 119: 0 --> 1	Char. 42: 0 --> 1	Char. 214: 1 --> 0
	Char. 52: 0 --> 1	Char. 215: 0 --> 1
Amabilis_uchoensis :	Some trees:	Char. 233: 1 --> 0
All trees:	Char. 9: 0 --> 1	
Char. 70: 1 --> 0	Char. 27: 0 --> 1	Platycheloides_nyasae :
Char. 122: 1 --> 0	Char. 201: 1 --> 0	All trees:
Char. 264: 2 --> 1		Char. 173: 1 --> 2
	Paiutemys_tibert :	Char. 177: 2 --> 3
Yuraramirim_montealtensis :	All trees:	Char. 192: 1 --> 0
All trees:	Char. 200: 1 --> 0	
Char. 85: 1 --> 0	Char. 216: 1 --> 0	Teneremys_lapparenti :
Char. 116: 1 --> 0	Char. 233: 1 --> 0	All trees:
Char. 128: 2 --> 1		Char. 215: 0 --> 1
	Algorachelus_peregrinus :	
Tartaruscola_teodorii :	All trees:	Mendozachelys_wichmanni :
All trees:	Char. 92: 1 --> 0	All trees:
Char. 1: 0 --> 1	Char. 216: 1 --> 0	Char. 182: 1 --> 0
Char. 13: 0 --> 1	Some trees:	Char. 195: 0 --> 1
Char. 17: 2 --> 1	Char. 217: 1 --> 0	Char. 216: 0 --> 1
Char. 42: 0 --> 1		Char. 219: 0 --> 1
Char. 43: 1 --> 0	Palemys_bowerbankii :	
Char. 46: 0 --> 1	All trees:	Rionegrochelys_caldieroi :
		All trees:

Char. 193: 0 --> 1	Char. 168: 0 --> 1	Char. 114: 1 --> 0
Char. 226: 0 --> 1		Char. 127: 0 --> 1
Char. 233: 1 --> 0	Palaeophrynopos_patagonicus	Char. 129: 1 --> 2
Lomalatachelys_neuquina :	:	Char. 263: 0 --> 1
All trees:	All trees:	Char. 265: 0 --> 1
Char. 173: 2 --> 1	Char. 181: 1 --> 2	Char. 266: 0 --> 1
Char. 180: 0 --> 1	Char. 222: 1 --> 2	Char. 268: 0 --> 1
Char. 183: 1 --> 0	Salamanchelys_palaeocenica	Char. 273: 1 --> 2
Dortoka_vasconica :	:	Node 134 :
All trees:	All trees:	All trees:
Char. 170: 1 --> 2	Char. 177: 0 --> 1	Char. 187: 0 --> 1
Char. 190: 1 --> 2	Char. 201: 0 --> 2	Char. 205: 0 --> 1
Char. 210: 1 --> 0	Char. 219: 2 --> 0	Char. 225: 1 --> 0
Char. 222: 1 --> 2	Char. 223: 0 --> 2	Char. 283: 0 --> 1
Char. 241: 2 --> 0	Char. 224: 2 --> 1	Node 135 :
Char. 278: 0 --> 1	Char. 240: 1 --> 0	All trees:
	Char. 241: 1 --> 0	No synapomorphies
Dortoka_botanica :	Podocnemis_pritchardi :	Node 136 :
All trees:	All trees:	All trees:
Char. 182: 1 --> 2	Char. 180: 0 --> 1	Char. 194: 1 --> 2
Char. 184: 0 --> 1	Char. 224: 1 --> 0	Char. 195: 0 --> 1
Char. 208: 0 --> 1	Char. 244: 0 --> 1	Char. 200: 1 --> 0
Char. 226: 0 --> 1	Podocnemis_negrii :	Char. 284: 0 --> 1
Char. 230: 1 --> 0	All trees:	Node 137 :
Birlimarr_gaffneyi :	Char. 178: 0 --> 1	All trees:
All trees:	Podocnemis_medemi :	Char. 180: 1 --> 0
Char. 125: 1 --> 0	All trees:	Char. 195: 0 --> 1
Char. 180: 0 --> 1	Char. 181: 2 --> 1	Char. 210: 1 --> 0
Char. 218: 1 --> 0	Char. 207: 1 --> 0	Char. 235: 0 --> 1
Char. 226: 0 --> 1	Char. 231: 0 --> 1	Node 138 :
Notoemys_zapatocaensis :	Some trees:	All trees:
All trees:	Char. 219: 0 --> 2	Char. 169: 0 --> 1
Char. 170: 0 --> 1	Ilartardia_cetiotesta :	Char. 185: 1 --> 0
Char. 210: 1 --> 0	All trees:	Char. 219: 2 --> 1
Char. 214: 0 --> 1	Char. 4: 0 --> 1	Node 139 :
Char. 229: 0 --> 1	Char. 22: 0 --> 1	All trees:
Char. 230: 1 --> 0	Char. 50: 0 --> 1	Char. 181: 1 --> 2
Elusor_macrurus :	Char. 74: 0 --> 1	Char. 224: 2 --> 0
All trees:	Char. 85: 0 --> 2	Char. 238: 0 --> 1
Char. 39: 1 --> 0	Char. 264: 0 --> 1	Char. 244: 0 --> 1
Char. 92: 0 --> 1	Gestemys_powelli :	Node 140 :
Char. 210: 1 --> 0	All trees:	All trees:
Char. 219: 2 --> 0	Char. 54: 1 --> 0	Char. 72: 0 --> 1
Char. 235: 0 --> 1	Char. 80: 2 --> 1	Char. 107: 1 --> 0
Linderochelys_rinconensis :	Char. 94: 3 --> 2	Char. 157: 0 --> 1
All trees:	Char. 98: 1 --> 2	

Char. 174: 23 --> 1	Char. 125: 0 --> 1	All trees:
	Char. 266: 1 --> 0	Char. 99: 0 --> 1
Node 141 :		Char. 196: 1 --> 0
All trees:	Node 148 :	Char. 210: 1 --> 0
Char. 9: 1 --> 2	All trees:	Char. 240: 1 --> 0
Char. 19: 3 --> 2	Char. 173: 2 --> 4	
Char. 150: 0 --> 1	Char. 206: 1 --> 0	Node 155 :
Char. 168: 0 --> 1		All trees:
Char. 264: 2 --> 1	Node 149 :	Char. 219: 2 --> 1
	All trees:	Char. 236: 0 --> 1
Node 142 :	Char. 54: 1 --> 0	
All trees:	Char. 159: 1 --> 0	Node 156 :
Char. 0: 0 --> 2	Char. 173: 1 --> 2	All trees:
Char. 42: 0 --> 1	Char. 191: 0 --> 1	Char. 4: 0 --> 1
Char. 128: 1 --> 0	Char. 196: 0 --> 1	Char. 152: 0 --> 1
Char. 149: 0 --> 1	Char. 276: 0 --> 1	Char. 173: 4 --> 3
Char. 152: 0 --> 2	Char. 282: 0 --> 1	Char. 269: 0 --> 1
Char. 161: 0 --> 1		
Char. 162: 0 --> 1	Node 150 :	Node 157 :
Char. 173: 4 --> 12	All trees:	All trees:
Char. 199: 1 --> 0	Char. 173: 0 --> 1	Char. 175: 1 --> 0
Char. 252: 0 --> 1	Char. 174: 0 --> 2	Char. 178: 0 --> 1
	Char. 175: 0 --> 1	Char. 179: 0 --> 1
Node 143 :	Char. 209: 1 --> 0	Char. 193: 0 --> 2
All trees:	Char. 233: 0 --> 1	Char. 219: 2 --> 1
Char. 192: 1 --> 2	Char. 238: 1 --> 0	Char. 244: 0 --> 1
Char. 202: 0 --> 1	Char. 281: 1 --> 2	
Char. 204: 0 --> 1		Node 158 :
Char. 206: 0 --> 1	Node 151 :	All trees:
	All trees:	Char. 171: 1 --> 0
Node 144 :	Char. 163: 0 --> 1	Char. 175: 1 --> 0
All trees:	Char. 170: 0 --> 1	Char. 177: 0 --> 1
Char. 180: 0 --> 1	Char. 186: 0 --> 1	Char. 190: 1 --> 0
Char. 205: 0 --> 1	Char. 202: 0 --> 1	Char. 192: 12 --> 3
Char. 218: 1 --> 0	Char. 206: 0 --> 1	Char. 205: 1 --> 0
		Char. 235: 0 --> 1
Node 145 :	Node 152 :	Node 159 :
All trees:	All trees:	All trees:
Char. 88: 0 --> 1	Char. 43: 0 --> 1	Char. 164: 0 --> 1
Char. 234: 0 --> 1	Char. 54: 0 --> 1	Char. 198: 0 --> 1
Char. 241: 2 --> 1	Char. 121: 0 --> 1	
	Char. 195: 0 --> 1	Node 160 :
Node 146 :	Char. 197: 0 --> 1	All trees:
All trees:	Char. 204: 0 --> 1	Char. 170: 1 --> 0
Char. 98: 1 --> 2	Char. 269: 0 --> 1	Char. 181: 2 --> 1
Char. 140: 1 --> 0		Char. 207: 0 --> 1
Char. 202: 1 --> 0	Node 153 :	Char. 225: 1 --> 0
	All trees:	
Node 147 :	Char. 101: 0 --> 1	Node 161 :
All trees:	Char. 194: 1 --> 2	All trees:
Char. 49: 0 --> 1		Char. 59: 0 --> 1
Char. 67: 1 --> 0	Node 154 :	

Char. 206: 1 --> 0	All trees:	All trees:
	Char. 0: 1 --> 2	Char. 80: 2 --> 0
Node 162 :	Char. 128: 1 --> 0	Char. 119: 0 --> 1
All trees:	Char. 169: 0 --> 1	
Char. 18: 2 --> 3	Char. 170: 1 --> 02	Node 173 :
Char. 19: 0 --> 2	Char. 171: 1 --> 2	All trees:
Char. 48: 2 --> 0	Char. 177: 0 --> 2	Char. 87: 1 --> 0
Char. 64: 0 --> 1	Char. 200: 1 --> 2	Some trees:
Char. 98: 1 --> 2		Char. 109: 0 --> 1
Char. 109: 0 --> 1	Node 166 :	
Char. 129: 0 --> 2	All trees:	Node 174 :
Char. 134: 0 --> 1	Char. 13: 1 --> 2	All trees:
Char. 167: 0 --> 1	Char. 81: 2 --> 0	Char. 19: 0 --> 1
Char. 190: 1 --> 0	Char. 139: 0 --> 1	Char. 113: 1 --> 2
Char. 236: 0 --> 1	Char. 174: 2 --> 01	Some trees:
Char. 274: 0 --> 2		Char. 69: 0 --> 1
	Node 167 :	Char. 81: 2 --> 1
	All trees:	Char. 82: 0 --> 1
	Char. 111: 1 --> 2	Char. 88: 1 --> 0
	Char. 117: 1 --> 0	Char. 89: 0 --> 1
	Char. 162: 0 --> 1	Char. 135: 0 --> 1
	Char. 193: 0 --> 1	Char. 141: 0 --> 2
	Char. 250: 1 --> 0	
	Node 168 :	Node 175 :
	All trees:	All trees:
	Char. 18: 2 --> 1	Char. 56: 0 --> 1
	Char. 59: 0 --> 1	Char. 74: 0 --> 1
	Char. 80: 2 --> 1	Char. 91: 0 --> 1
	Char. 100: 2 --> 1	Char. 118: 1 --> 2
	Char. 108: 0 --> 1	Char. 128: 1 --> 2
	Char. 127: 0 --> 1	
	Char. 128: 1 --> 2	Node 176 :
		All trees:
	Node 169 :	Char. 84: 0 --> 1
	All trees:	Char. 109: 1 --> 0
	Char. 129: 0 --> 1	Char. 127: 0 --> 1
	Node 170 :	Node 177 :
	All trees:	All trees:
	Char. 92: 0 --> 1	Char. 53: 0 --> 1
	Char. 93: 0 --> 1	Char. 82: 1 --> 0
	Char. 94: 1 --> 2	Char. 227: 0 --> 1
	Char. 100: 2 --> 01	Some trees:
		Char. 44: 0 --> 1
		Char. 231: 0 --> 1
	Node 171 :	
	All trees:	Node 178 :
	Char. 30: 0 --> 1	All trees:
	Char. 122: 1 --> 0	Char. 4: 0 --> 1
	Char. 123: 0 --> 1	Char. 12: 0 --> 1
		Char. 143: 0 --> 1
		Char. 215: 0 --> 1
	Node 172 :	
Node 163 :		
All trees:		
Char. 0: 0 --> 1		
Char. 2: 0 --> 1		
Char. 5: 0 --> 1		
Char. 17: 1 --> 2		
Char. 18: 0 --> 2		
Char. 23: 0 --> 1		
Char. 46: 0 --> 1		
Char. 88: 0 --> 1		
Char. 96: 0 --> 1		
Char. 132: 0 --> 1		
Char. 148: 1 --> 2		
Char. 197: 0 --> 1		
Char. 210: 1 --> 0		
Char. 234: 0 --> 1		
Char. 241: 2 --> 1		
Char. 247: 0 --> 1		
Char. 261: 0 --> 1		
Node 164 :		
All trees:		
Char. 9: 1 --> 2		
Char. 98: 1 --> 2		
Char. 182: 1 --> 0		
Char. 184: 1 --> 0		
Char. 205: 0 --> 1		
Char. 214: 1 --> 0		
Char. 222: 1 --> 0		
Char. 223: 0 --> 2		
Char. 225: 1 --> 0		
Char. 230: 1 --> 2		
Char. 276: 0 --> 1		
Node 165 :		

Node 179 :	Node 187 :	All trees:
All trees:	All trees:	Char. 29: 0 --> 1
Char. 86: 0 --> 1	Char. 51: 1 --> 2	
Char. 120: 0 --> 1	Node 188 :	Node 197 :
Char. 133: 0 --> 1	All trees:	All trees:
Char. 145: 0 --> 1	Char. 52: 0 --> 1	Char. 98: 1 --> 2
Char. 216: 0 --> 1	Char. 92: 1 --> 0	Char. 100: 0 --> 1
Char. 249: 1 --> 0	Char. 126: 0 --> 1	Char. 101: 0 --> 1
Char. 251: 1 --> 0	Char. 129: 1 --> 2	Char. 106: 1 --> 0
Char. 267: 1 --> 0		Char. 263: 0 --> 1
	Node 189 :	Node 198 :
Node 180 :	All trees:	All trees:
All trees:	Char. 44: 0 --> 1	Char. 9: 1 --> 0
Char. 1: 0 --> 1	Char. 114: 1 --> 2	Char. 38: 0 --> 1
Char. 6: 0 --> 1	Node 190 :	Char. 42: 0 --> 1
Char. 42: 0 --> 1	All trees:	Char. 46: 0 --> 1
Char. 51: 0 --> 1	Char. 33: 1 --> 0	Char. 66: 0 --> 1
Char. 98: 1 --> 2	Char. 60: 1 --> 0	
		Node 199 :
Node 181 :	Node 191 :	All trees:
All trees:	All trees:	Char. 51: 0 --> 1
Char. 93: 1 --> 0	Char. 131: 0 --> 1	Char. 55: 1 --> 0
Char. 100: 0 --> 1		Char. 56: 1 --> 0
Char. 101: 0 --> 1	Node 192 :	Char. 73: 0 --> 1
	All trees:	Char. 74: 1 --> 0
Node 182 :	Char. 98: 2 --> 1	Char. 92: 1 --> 0
All trees:		Char. 110: 0 --> 1
Char. 9: 1 --> 2	Node 193 :	Char. 129: 1 --> 2
Char. 53: 0 --> 1	All trees:	
	Char. 41: 0 --> 1	Node 200 :
Node 183 :	Char. 97: 0 --> 1	All trees:
All trees:	Char. 255: 0 --> 1	Char. 7: 0 --> 1
Char. 33: 0 --> 1	Char. 264: 0 --> 2	
Char. 60: 0 --> 1	Char. 269: 0 --> 1	Node 201 :
Char. 74: 1 --> 2		All trees:
	Node 194 :	Char. 21: 0 --> 1
Node 184 :	All trees:	Char. 29: 1 --> 0
All trees:	Char. 15: 1 --> 0	Char. 52: 0 --> 1
Char. 55: 1 --> 2	Char. 19: 1 --> 0	
Char. 56: 1 --> 2	Char. 53: 0 --> 1	Node 202 :
Char. 263: 0 --> 1	Char. 93: 1 --> 0	All trees:
		Char. 54: 1 --> 0
Node 185 :	Node 195 :	Char. 85: 0 --> 3
All trees:	All trees:	Char. 87: 0 --> 2
Char. 206: 1 --> 0	Char. 1: 0 --> 1	
Char. 226: 1 --> 0	Char. 9: 0 --> 1	Node 203 :
	Char. 35: 0 --> 1	All trees:
Node 186 :	Char. 36: 0 --> 1	Char. 155: 1 --> 0
All trees:		Char. 206: 1 --> 0
Char. 50: 0 --> 1	Node 196 :	Char. 264: 0 --> 2

Node 204 :	All trees:	Char. 147: 0 --> 1
All trees:	Char. 135: 0 --> 1	Char. 233: 1 --> 0
Char. 96: 1 --> 0	Char. 141: 0 --> 1	
Char. 116: 0 --> 1	Char. 264: 2 --> 1	Node 223 :
Char. 117: 0 --> 1		All trees:
Node 205 :	Node 215 :	Char. 28: 0 --> 1
All trees:	All trees:	Char. 45: 0 --> 1
Char. 85: 0 --> 1	Char. 55: 0 --> 1	Some trees:
Char. 113: 1 --> 0	Char. 56: 1 --> 0	Char. 26: 3 --> 2
	Char. 57: 0 --> 1	Char. 200: 1 --> 0
Node 206 :	Char. 95: 0 --> 1	Char. 216: 0 --> 1
All trees:	Char. 144: 0 --> 1	
Char. 17: 2 --> 1	Node 216 :	Node 224 :
	All trees:	All trees:
Node 207 :	Char. 208: 0 --> 1	Char. 184: 0 --> 1
All trees:		
Char. 238: 0 --> 1	Node 217 :	Node 225 :
	All trees:	All trees:
Node 208 :	Char. 95: 1 --> 0	Char. 13: 0 --> 1
All trees:	Char. 182: 1 --> 0	Char. 232: 0 --> 1
Char. 227: 0 --> 1	Char. 200: 1 --> 0	Char. 241: 1 --> 2
	Char. 221: 1 --> 0	
Node 209 :		Node 226 :
All trees:	Node 218 :	All trees:
Char. 70: 1 --> 0	All trees:	Char. 230: 1 --> 0
	Char. 8: 0 --> 1	Some trees:
Node 210 :	Char. 137: 0 --> 1	Char. 156: 1 --> 2
All trees:		Char. 207: 0 --> 1
Char. 13: 1 --> 2	Node 219 :	
	All trees:	Node 227 :
Node 211 :	Char. 26: 0 --> 1	All trees:
All trees:	Char. 54: 1 --> 0	Char. 59: 0 --> 1
Char. 16: 0 --> 1	Char. 64: 0 --> 1	Char. 70: 1 --> 0
Char. 18: 2 --> 0		Char. 192: 1 --> 0
Char. 105: 0 --> 1	Node 220 :	Char. 245: 1 --> 0
Char. 115: 0 --> 1	All trees:	
Char. 156: 0 --> 1	Char. 48: 2 --> 1	Node 228 :
Char. 165: 2 --> 1	Char. 95: 0 --> 1	All trees:
Char. 250: 0 --> 1	Char. 236: 0 --> 1	Char. 26: 3 --> 0
Char. 252: 0 --> 1		
Node 212 :	Node 221 :	Node 229 :
All trees:	All trees:	All trees:
Char. 80: 2 --> 1	Char. 46: 0 --> 1	Char. 25: 0 --> 1
		Char. 73: 0 --> 1
Node 213 :	Node 222 :	Char. 78: 0 --> 1
All trees:	Some trees:	Char. 110: 0 --> 1
Char. 22: 0 --> 1	Char. 9: 1 --> 0	
Char. 39: 0 --> 1	Char. 13: 1 --> 0	Node 230 :
	Char. 64: 0 --> 1	All trees:
Node 214 :	Char. 95: 1 --> 2	Char. 53: 0 --> 1
	Char. 102: 1 --> 0	
		Node 231 :

All trees:  
 Char. 140: 1 --> 0  
  
 Node 232 :  
 All trees:  
 Char. 88: 0 --> 1  
  
 Node 233 :  
 All trees:  
 Char. 90: 0 --> 1  
  
 Node 234 :  
 All trees:  
 Char. 54: 1 --> 0  
 Char. 55: 1 --> 2  
 Char. 69: 0 --> 1  
 Char. 74: 1 --> 2  
 Char. 75: 0 --> 1  
 Char. 89: 0 --> 1  
 Char. 127: 0 --> 1  
  
 Node 235 :  
 All trees:  
 Char. 76: 0 --> 1  
  
 Node 236 :  
 All trees:  
 Char. 32: 1 --> 0  
 Char. 77: 0 --> 2  
 Char. 79: 0 --> 1  
 Char. 114: 1 --> 2  
 Char. 245: 1 --> 2  
  
 Node 237 :

All trees:  
 Char. 77: 0 --> 1  
 Char. 87: 1 --> 0  
  
 Node 238 :  
 All trees:  
 Char. 40: 1 --> 0  
 Char. 129: 1 --> 2  
  
 Node 239 :  
 All trees:  
 Char. 11: 0 --> 1  
 Char. 34: 0 --> 1  
 Char. 35: 0 --> 1  
 Char. 58: 0 --> 1  
 Some trees:  
 Char. 70: 12 --> 0  
  
 Node 240 :  
 All trees:  
 Char. 234: 1 --> 0  
 Some trees:  
 Char. 217: 1 --> 0  
 Char. 231: 1 --> 0  
 Char. 233: 1 --> 0  
  
 Node 241 :  
 All trees:  
 Char. 181: 1 --> 2  
 Char. 190: 1 --> 2  
 Char. 207: 0 --> 1  
  
 Node 242 :  
 All trees:

Char. 204: 0 --> 1  
  
 Node 243 :  
 All trees:  
 Char. 193: 0 --> 1  
  
 Node 244 :  
 All trees:  
 Char. 244: 0 --> 1  
  
 Node 245 :  
 All trees:  
 Char. 180: 0 --> 1  
 Char. 185: 0 --> 1  
 Char. 242: 0 --> 1  
 Char. 279: 0 --> 1  
 Char. 280: 0 --> 1  
  
 Node 246 :  
 All trees:  
 Char. 115: 0 --> 1  
 Char. 128: 1 --> 2  
 Char. 206: 0 --> 1  
 Char. 230: 1 --> 0  
  
 Node 247 :  
 All trees:  
 Char. 230: 1 --> 0  
  
 Node 248 :  
 All trees:  
 Char. 234: 1 --> 0

## 2. Measurements of *Gestemys powelli* specimens

### Measurements

<b>Skull</b>		<b>IBIGEO-P107</b>
Middle length as preserved		62 mm
Maximum width		43 mm
Width between orbits		11 mm
Width of left orbit		11 mm?
Width of the right orbit		13 mm
Width of external nares		? mm
Width of internal nares		11 mm
Maximum height at quadrate		25.5 mm
Width skull at middle orbit		34 mm
Length from prefrontal-supraoccipital		51 mm
Height of the left orbit		19 mm?
Height of the right orbit		18 mm
Skull height at occipital condyle		24 mm
Anterior width triturating surfaces (LR)		7 mm
Anterior width triturating surfaces		5 mm
Posterior width triturating surfaces (LR)		13 mm
Posterior width triturating surfaces		11 mm
Width of palatal at foramen palatinum posterius		27 mm
Length from frontal to occipital condyle		47 mm
<b>Lower Jaw</b>		
Total length		38.6 mm
Height of jaw at processus coronoideus		12.2 mm
Width of triturating surfaces at anterior preoprocessus coronoideus		6.9 mm
Width of triturating surfaces at symphysis		1.1 mm
Width of symphysis		?
Maximum length of fossa meckelii		8.5 mm
Maximum width of fossa meckelii		1.1 mm
Width of jaw at processus coronoideus		1.2 mm
Width area articular mandibularis		4.9 mm
Length from processus coronoideus to the end of lower jaw		18.9 mm
<b>Shell</b>		



Carapace length	252 mm
Carapace width	228 mm
Length x width of neural 5	17 x 19 mm
Length x width of neural 6	18 x 20 mm
Length x width of peripheral 2	29 x 26 mm
Length x width of peripheral 3	30 x 28 mm
Length x width of peripheral 4	19 x 31 mm
Length x width of peripheral 5	24 x 28 mm
Length x width of peripheral 6	24 x 27 mm
Length x width of peripheral 7	? x 22 mm
Length x width of peripheral 8	? x 35 mm
Length x width of costal 1	49 x 63 mm
Length x width of costal 2	24 x 90 mm
Length x width of costal 3	21 x 94 mm
Length x width of costal 4	22 x 89 mm
Length x width of costal 5	21 x 80 mm
Length x width of costal 6	23 x 72 mm
Length x width of vertebral 2	45 x ? mm
Length x width of vertebral 3	43 x ? mm
Length x width of vertebral 4	43 x ? mm
Length x width of pleural 1	66 x 71 mm
Length x width of pleural 2	33 x 75 mm
Length x width of pleural 3	43 x 61 mm
Length x width of marginal 2	22 x 36 mm
Length x width of marginal 3	20 x 28 mm
Length x width of marginal 4	23 x 22 mm
Length x width of marginal 5	24 x 32 mm
Plastron length	223 mm
Length x width of anterior plastron lobe	? x 135 mm
Length x width of posterior plastron lobe	108 x 131 mm
Axillo-Inguinal distance (bridge length)	77 mm
Length of the hyoplastron in the midline	45 mm
Length x width of the hyoplastron	95 x 78 mm
Length x width of the mesoplastron	37 x 34 mm
Length x width of the hypoplastron	79 x 69 mm
Length x width of the xiphiplastron	72 x 49 mm
Length of xiphiplastron in the midline	58 mm

Length x width of anal notch	19 x 39 mm
Length of the abdominal scute in plastral midline	53 mm
Length of the femoral scute in plastral midline	52 mm
Length of the anal scute in plastral midline	37 mm

Shell	IBIGEO-P108
Carapace length	199 mm
Carapace width	170 mm
Length x width of Nuchal	34 x 37 mm
Length x width of neural 1	21 x 11 mm
Length x width of neural 2	16 x 14 mm
Length x width of neural 3	16 x 12 mm
Length x width of neural 4	15 x 16 mm
Length x width of neural 5	15 x 16 mm
Length x width of neural 6	16 x 18 mm
Length x width of suprapygal	26 x 28 mm
Length x width of pygal	17 x 18 mm
Length x width of peripheral 1	27 x 23 mm
Length x width of peripheral 2	26 x 23 mm
Length x width of peripheral 3	18 x 20 mm
Length x width of peripheral 4	16 x 22 mm
Length x width of peripheral 5	17 x 21 mm
Length x width of peripheral 6	19 x 23 mm
Length x width of peripheral 7	17 x 24 mm
Length x width of peripheral 8	20 x 29 mm
Length x width of peripheral 9	19 x 24 mm
Length x width of costal 1	34 x 53 mm
Length x width of costal 2	18 x 62 mm
Length x width of costal 3	15 x 71 mm
Length x width of costal 4	18 x 64 mm
Length x width of costal 5	17 x 53 mm
Length x width of costal 6	13 x 52 mm
Length x width of costal 7	11 x 54 mm
Length x width of costal 8	16 x 31 mm
Length x width of vertebral 1	36 x 42 mm
Length x width of vertebral 2	38 x 41 mm
Length x width of vertebral 3	39 x 43 mm

Length x width of vertebral 4	38 x 48 mm
Length x width of vertebral 5	37 x 51 mm
Length x width of pleural 1	57 x 49 mm
Length x width of pleural 2	35 x 56 mm
Length x width of pleural 3	31 x 48 mm
Length x width of pleural 4	31 x 38 mm
Length x width of marginal 1	11 x 20 mm
Length x width of marginal 2	17 x 19 mm
Length x width of marginal 3	16 x 20 mm
Length x width of marginal 4	19 x 22 mm
Length x width of marginal 5	16 x 24 mm
Length x width of marginal 6	11 x 19 mm
Length x width of marginal 7	9 x 16 mm
Plastron length	168 mm
Length x width of anterior plastral lobe	50 x 104 mm
Length x width of posterior plastral lobe	73 x 91 mm
Axillo-Inguinal distance (bridge length)	64 mm
Length x width of epiplastron	36 x 42 mm
Length of the epiplastral suture in plastral midline	16 mm
Length x width of the entoplastron	36 x 34 mm
Length of the hyoplastron in the midline	32 mm
Length x width of the hyoplastron	25 mm
Length x width of the mesoplastron	62 x 59 mm
Length x width of the hypoplastron	24 x 19 mm
Length x width of the xiphiplastron	54 x 64 mm
Length of the xiphiplastron in the midline	55 x 49 mm
Length x width of anal notch	50 mm
Length of the gular scute in plastral midline	11 x 35 mm
Length of the humeral scute in plastral midline	29 mm
Length of the pectoral scute in plastral midline	28 mm
Length of the abdominal scute in plastral midline	34 mm
Length of the femoral scute in plastral midline	35 mm
Length of the anal scute in plastral midline	28 mm