Appendix C.1

Synapomorphies common to eight trees

*Prospaniomys*

All trees:

No autapomorphies:

*Branisamys*

All trees:

Char. 1: 0 --> 1

Char. 3: 1 --> 0

Char. 10: 0 --> 1

Some trees:

Char. 46: 1 --> 0

*Scleromys* *osbornianus*

All trees:

Char. 3: 1 --> 2

?*Scleromys*? *shurmanni*

All trees:

Char. 14: 0 --> 1

Some trees:

Char. 9: 1 --> 0

*Tetrastylus*

All trees:

Char. 11: 0 --> 1

Char. 20: 0 --> 2

Char. 33: 0 --> 1

*Dinomys*

All trees:

Char. 13: 1 --> 0

Char. 21: 1 --> 0

*Garridomys*

All trees:

Char. 46: 1 --> 0

*Eoviscaccia*

All trees:

Char. 42: 0 --> 1

Some trees:

Char. 3: 2 --> 3

*Prolagostomus*

All trees:

No autapomorphies:

*Lagostomus*

All trees:

Char. 9: 0 --> 1

Char. 18: 0 --> 1

Char. 33: 0 --> 1

Some trees:

Char. 46: 1 --> 2

*Chinchilla*

All trees:

No autapomorphies:

*Lagidium*

All trees:

No autapomorphies:

*Neoepiblema* *ambrosettianus*

All trees:

No autapomorphies:

*Neoepiblema* *horridula*

All trees:

No autapomorphies:

*Phoberomys* *burmeisteri*

All trees:

No autapomorphies:

*Phoberomys* *pattersoni*

All trees:

No autapomorphies:

*Perimys*

All trees:

Char. 10: 1 --> 3

Some trees:

Char. 2: 2 --> 1

Char. 3: 2 --> 3

Char. 19: 0 --> 1

Char. 42: 0 --> 2

*Incamys* *bolivianus*

All trees:

Char. 1: 0 --> 1

Some trees:

Char. 49: 0 --> 1

*Saremmys* *ligcura* gen. sp. nov.

All trees:

Char. 1: 0 --> 1

Char. 4: 1 --> 0

Some trees:

Char. 49: 0 --> 1

*Scotamys* *antiquus*

All trees:

Char. 10: 1 --> 2

Char. 42: 0 --> 2

Chinchilloidea

All trees:

No synapomorphies

Dinomyidae (*Scleromys osbornianus* + *Scleromys*? *shurmanni* + *Dinomys* + *Tetrastylus*)

All trees:

Char. 18: 0 --> 1

Char. 47: 0 --> 2

Some trees:

Char. 13: 0 --> 1

Char. 28: 0 --> 1

Char. 49: 0 --> 1

*Scleromys*? *shurmanni* + *Dinomys* + *Tetrastylus*

All trees:

Char. 23: 0 --> 1

Char. 34: 0 --> 1

Some trees:

Char. 8: 1 --> 2

*Dinomys* + *Tetrastylus*

All trees:

Char. 0: 1 --> 2

Char. 4: 0 --> 1

Char. 6: 0 --> 1

Char. 7: 0 --> 1

Char. 16: 1 --> 0

Char. 25: 0 --> 1

Char. 32: 0 --> 1

Char. 36: 0 --> 1

Node B

All trees:

Char. 4: 0 --> 1

Char. 10: 0 --> 1

Char. 47: 0 --> 1

Node A

All trees:

Char. 2: 0 --> 1

Char. 20: 0 --> 1

Some trees:

Char. 26: 1 --> 0

Node D

All trees:

Char. 6: 0 --> 1

Some trees:

Char. 3: 2 --> 3

Node C

All trees:

Char. 45: 1 --> 0

Chinchillidae (*Lagostomus* + *Chinchilla* + *Lagidium* + *Prolagostomus*)

All trees:

Char. 27: 1 --> 2

Char. 40: 0 --> 1

Char. 42: 0 --> 3

Char. 44: 0 --> 1

Node E

All trees:

Char. 0: 1 --> 2

Some trees:

Char. 2: 1 --> 2

Chinchillinae (*Lagidium* + *Chinchilla*)

All trees:

Char. 10: 1 --> 3

Char. 15: 0 --> 1

Char. 30: 0 --> 1

Some trees:

Char. 3: 3 --> 2

Char. 19: 0 --> 1

Neoepiblemidae (*Perimys* + *Neoepiblema* + *Phoberomys*)

All trees:

Char. 6: 1 --> 2

Char. 7: 1 --> 0

Char. 23: 0 --> 1

Some trees:

Char. 21: 1 --> 0

Char. 46: 1 --> 2

*Phoberomys*

All trees:

Char. 43: 0 --> 1