

**Table S1.** Forest sites sampled in New Zealand, with information on location, treatment, geographic coordinates, elevation, and vegetation.

Treated (rat management)				Non-treated (no rodent management)			
Latitude <sup>1</sup> (S)	Longitude (E)	Elevation (m)	Vegetation <sup>2</sup>	Easting (S)	Northing (E)	Elevation (m)	Vegetation <sup>2</sup>
<b>Trounson Kauri Park, Northland</b>				<b>Kaitui Scenic Reserve, Northland</b>			
35.7264	173.6502	250	<i>Beilschmiedia tarairi</i> (A.Cunn.) Benth. & Hook. f. ex Kirk, <i>Agathis australis</i> (D. Don) Lindl., <i>Podocarpus totara</i> G. Benn. ex D. Don, <i>Phyllocladus trichomanoides</i> D. Don	35.7181	173.5623	190	<i>B. taraire</i> , <i>A. australis</i> , <i>P. totara</i> , <i>P. trichomanoides</i>
<b>The Cascades, Waitakere Ranges, Auckland</b>				<b>Rumpus, Waitakere Ranges, Auckland</b>			
36.8925	174.5098	240	<i>A. australis</i> , <i>P. trichomanoides</i>	36.9017	174.5342	260	<i>A. australis</i> , <i>P. trichomanoides</i>
<b>Mochau Range, Coromandel, Waikato</b>				<b>Mochau Range, Coromandel, Waikato</b>			
36.5189	175.4058	140	<i>Vitex lucens</i> Kirk, <i>Dysoxylum spectabile</i> Hook. f., <i>Rhopalostylis sapida</i> (Sol. ex G. Forst.) H. Wendl. & Drude, <i>Litsea calicularis</i> Kirk, <i>Meliccytus ramiflorus</i> J.R. Forst. & G. Forst., <i>Cyathea dealbata</i> (Forst.) Sw.	36.5343	175.4419	140	<i>V. lucens</i> , <i>D. spectabile</i> , <i>R. sapida</i> , <i>L. calicularis</i> , <i>M. ramiflorus</i> , <i>C. dealbata</i>
<b>Te Urewera Mainland Island, Bay of Plenty</b>				<b>Te Urewera Mainland Island, Bay of Plenty</b>			
38.3322	177.1456	670	<i>Beilschmiedia tawa</i> Kirk, <i>Weinmannia racemosa</i> L. f., <i>C. dealbata</i>	38.3288	177.1255	389	<i>B. tawa</i> , <i>W. racemosa</i> , <i>C. dealbata</i>
<b>Ruakuri, Waitomo, Waikato</b>				<b>Ngatapuae, Waitomo, Waikato</b>			
38.2604	175.0771	180	<i>W. racemosa</i> , <i>B. tawa</i> , <i>M. ramiflorus</i>	38.2360	175.0668	180	<i>W. racemosa</i> , <i>B. tawa</i> , <i>M. ramiflorus</i>
<b>Whareorino Forest, Waikato</b>				<b>Whareorino Forest, Waikato</b>			
38.3814	174.7925	620	<i>B. tawa</i> , <i>W. racemosa</i> , <i>M. ramiflorus</i> , <i>C. dealbata</i>	38.4035	174.7942	550	<i>B. tawa</i> , <i>W. racemosa</i> , <i>M. ramiflorus</i> , <i>C. dealbata</i>
<b>Boundary Stream Mainland Island, Hawke's Bay</b>				<b>Boundary Stream, Hawke's Bay</b>			
39.1605	174.8130	685	<i>W. racemosa</i> , <i>Fuscospora fusca</i> (Hook. f.) Heenan & Smissen, <i>F. solandri</i> (Hook. f.) Heenan & Smissen, <i>P. totara</i> , <i>Nestegis cunninghamii</i> (Hook. f.) L.A.S. Johnson	39.1218	176.8090	740	<i>W. racemosa</i> , <i>F. fusca</i> , <i>P. totara</i> , <i>N. cunninghamii</i>
<b>Pukawa Bay, Turangi</b>				<b>Pukawa Bay, Turangi</b>			
38.9185	175.7522	400	<i>W. racemosa</i> , <i>M. ramiflorus</i> , <i>C. dealbata</i>	38.9205	175.7504	400	<i>W. racemosa</i> , <i>M. ramiflorus</i> , <i>C. dealbata</i>
<b>Abel Tasman National Park, Canaan, Takaka</b>				<b>Abel Tasman National Park, Canaan, Takaka</b>			
40.9404	172.8805	765	<i>Lophozonia menziesii</i> (Hook. f.) Heenan & Smissen, <i>P. totara</i> , <i>Griselinia littoralis</i> Raoul	40.9383	172.8869	770	<i>L. menziesii</i> , <i>P. totara</i> , <i>G. littoralis</i>

<sup>1</sup> Latitude and longitude given as WGS84 coordinates<sup>2</sup> Dominant forest canopy species

**Table S2.** Land snail species recorded in samples from forest blocks at nine locations in New Zealand, with family, biostatus, and shell size.

Species <sup>1</sup>	Family	BioStatus	Shell height (H) (mm) <sup>2</sup>	Shell width (W) (mm)	Shell H:W	Specific maximum dimension (mm)	Mean observed maximum shell dimension (mm) <sup>3</sup>
<i>Tornatellides subperforatus</i> (Suter, 1909)	Achatinellidae	Endemic	3.50	2.20	1.59	3.50	2.31
<i>Tornatellinops novoseelandica</i> (Pfeiffer, 1853)	Achatinellidae	Endemic	3.50	1.50	2.33	3.50	2.31
<i>Allodiscus brooki</i> (Marshall & Barker, 2008)	Charopidae	Endemic	3.00	5.00	0.60	5.00	3.32
<i>Allodiscus chion</i> (Sykes, 1896)	Charopidae	Endemic	3.00	5.00	0.60	5.00	3.32
<i>Allodiscus climoi</i> (Marshall & Barker, 2008)	Charopidae	Endemic	2.85	5.00	0.57	5.00	3.32
<i>Allodiscus dimorphus</i> (L. Pfeiffer, 1853)	Charopidae	Endemic	6.00	9.50	0.63	9.50	6.33
<i>Allodiscus kakano</i> (Marshall & Barker, 2008)	Charopidae	Endemic	2.05	3.75	0.55	3.75	2.48
<i>Allodiscus spiritus</i> (Powell, 1952)	Charopidae	Endemic	4.50	7.00	0.64	7.00	4.66
<i>Allodiscus tullia</i> (Gray, 1850)	Charopidae	Endemic	2.70	3.87	0.70	3.87	2.56
<i>Allodiscus urquharti</i> (Suter, 1894)	Charopidae	Endemic	1.10	2.00	0.55	2.00	1.31
<i>Allodiscus venulatus</i> (L. Pfeiffer, 1857)	Charopidae	Endemic	3.00	6.00	0.50	6.00	3.99
<i>Allodiscus worthyi</i> (Marshall & Barker, 2008)	Charopidae	Endemic	3.65	5.3	0.69	5.3	3.52
<i>Canaliodiscus eliottae</i> (N. Gardner, 1968)	Charopidae	Endemic	2.50	5.00	0.50	5.00	3.32
<i>Cavellia anguicula</i> (Reeve, 1852)	Charopidae	Endemic	2.20	4.50	0.49	4.50	2.98
<i>Cavellia brouni</i> (Suter, 1891)	Charopidae	Endemic	1.00	2.50	0.40	2.50	1.64
<i>Cavellia buccinella</i> (Reeve, 1852)	Charopidae	Endemic	1.30	3.00	0.43	3.00	1.98
<i>Cavellia colensoi</i> (Suter, 1890)	Charopidae	Endemic	2.25	6.10	0.37	6.10	4.05
<i>Cavellia irregularis</i> (Suter, 1890)	Charopidae	Endemic	1.50	3.00	0.50	3.00	1.98
<i>Cavellia marstoni</i> (Climo, 1969)	Charopidae	Endemic	1.95	3.20	0.61	3.20	2.11
<i>Cavellia roseveari</i> (Suter, 1896)	Charopidae	Endemic	2.00	4.00	0.50	4.00	2.65
<i>Cavellia serpentinula</i> (Suter, 1891)	Charopidae	Endemic	1.30	2.80	0.46	2.80	1.84
<i>Cavellia sterkiana</i> (Suter, 1891)	Charopidae	Endemic	2.00	4.00	0.50	4.00	2.65
<i>Cavellia subinfecta</i> (Suter, 1899)	Charopidae	Endemic	2.00	4.00	0.50	4.00	2.65
<i>Cavellioropa cookiana</i> (Dell, 1952)	Charopidae	Endemic	1.00	1.70	0.59	1.70	1.11
<i>Cavellioropa huttoni</i> (Suter, 1890)	Charopidae	Endemic	1.80	2.80	0.64	2.80	1.84
<i>Cavellioropa microrrhina</i> (Suter, 1909)	Charopidae	Endemic	1.10	1.90	0.58	1.90	1.24
<i>Cavellioropa moussoni</i> (Suter, 1890)	Charopidae	Endemic	2.50	5.25	0.48	5.25	3.48
<i>Charopa bianca</i> (Hutton, 1883)	Charopidae	Endemic	1.20	2.50	0.48	2.50	1.64
<i>Charopa coma</i> (Gray, 1843)	Charopidae	Endemic	4.00	6.00	0.67	6.00	3.99
<i>Charopa montivaga</i> (Suter, 1894)	Charopidae	Endemic	1.50	3.20	0.47	3.20	2.11
<i>Charopa parva</i> (Suter, 1909)	Charopidae	Endemic	1.30	2.78	0.47	2.78	1.83
<i>Charopa pilsbryi</i> (Suter, 1894)	Charopidae	Endemic	1.30	2.50	0.52	2.50	1.64
Charopidae sp. 106 (M.76803)	Charopidae	Endemic	1.15	2.56	0.45	2.56	1.68
Charopidae sp. 12 (M.129630)	Charopidae	Endemic	2.10	3.10	0.68	3.10	2.04
Charopidae sp. 134 (M.56569)	Charopidae	Endemic	1.17	1.88	0.62	1.88	1.23
Charopidae sp. 137 (M.56568)	Charopidae	Endemic	0.96	2.38	0.40	2.38	1.56
Charopidae sp. 14 (M.24699)	Charopidae	Endemic	1.70	2.95	0.58	2.95	1.94
Charopidae sp. 155 (M.79509)	Charopidae	Endemic	1.18	2.54	0.46	2.54	1.67
Charopidae sp. 159 (M.102020)	Charopidae	Endemic	0.78	1.83	0.43	1.83	1.19
Charopidae sp. 161 (M.126641)	Charopidae	Endemic	4.55	7.05	0.65	7.05	4.69
Charopidae sp. 18 (M.127819)	Charopidae	Endemic	2.20	4.50	0.49	4.50	2.98
Charopidae sp. 193 (M.73285)	Charopidae	Endemic	1.50	2.25	0.67	2.25	1.47
Charopidae sp. 37 (M.75855)	Charopidae	Endemic	1.20	2.22	0.54	2.22	1.45
Charopidae sp. 38 (M.29851)	Charopidae	Endemic	1.22	2.56	0.48	2.56	1.68
Charopidae sp. 44 (M.23304)	Charopidae	Endemic	1.60	2.30	0.70	2.30	1.51
Charopidae sp. 50 (M.22563)	Charopidae	Endemic	1.40	2.80	0.50	2.80	1.84
Charopidae sp. 71 (M.48221)	Charopidae	Endemic	4.00	4.40	0.91	4.40	2.91
Charopidae sp. 80 (M.129711)	Charopidae	Endemic	2.04	4.48	0.46	4.48	2.97
Charopidae sp. 94 (M.127806)	Charopidae	Endemic	2.30	4.10	0.56	4.10	2.71
<i>Chaureopa mossi</i> (R. Murdoch, 1897)	Charopidae	Endemic	2.80	5.00	0.56	5.00	3.32
<i>Chaureopa planulatus</i> (Hutton, 1883)	Charopidae	Endemic	2.00	3.80	0.53	3.80	2.51
<i>Chaureopa titirangiensis</i> (Suter, 1896)	Charopidae	Endemic	2.23	4.37	0.51	4.37	2.89
<i>Climocella akarana</i> (Goulstone, 1996)	Charopidae	Endemic	1.25	2.50	0.50	2.50	1.64
<i>Climocella haurakiensis</i> (Goulstone, 1996)	Charopidae	Endemic	2	3.50	0.60	3.50	2.31
<i>Climocella hukuiaia</i> (Goulstone & Mayhill, 1998)	Charopidae	Endemic	1.50	3.00	0.50	3.00	1.98
<i>Climocella intermedia</i> (Goulstone, 1997)	Charopidae	Endemic	1.30	2.70	0.48	2.70	1.78
<i>Climocella kaitaka</i> (Goulstone, 1996)	Charopidae	Endemic	1.40	2.80	0.50	2.80	1.84
<i>Climocella maculata</i> (Suter, 1890)	Charopidae	Endemic	1.60	3.20	0.50	3.20	2.11
<i>Climocella prestoni</i> (Sykes, 1895)	Charopidae	Endemic	1.20	2.70	0.44	2.70	1.78
<i>Climocella rata</i> (Goulstone, 1996)	Charopidae	Endemic	1.80	3.00	0.60	3.00	1.98
<i>Climocella triticum</i> (Goulstone & Mayhill, 1998)	Charopidae	Endemic	1.50	2.60	0.58	2.60	1.71
<i>Fectola charopiformis</i> (N. Gardner, 1967)	Charopidae	Endemic	1.00	2.50	0.40	2.50	1.64
<i>Fectola infecta</i> (Reeve, 1852)	Charopidae	Endemic	1.60	3.50	0.46	3.50	2.31
<i>Fectola jamiesoni</i> (Climo, 1978)	Charopidae	Endemic	1.35	2.81	0.48	2.81	1.85
<i>Fectola jessica</i> (Hutton, 1883)	Charopidae	Endemic	2.00	4.25	0.47	4.25	2.81
<i>Fectola mira</i> (Webster, 1908)	Charopidae	Endemic	1.30	2.50	0.52	2.50	1.64
<i>Fectola trilamellata</i> (Climo, 1978)	Charopidae	Endemic	1.30	2.80	0.46	2.80	1.84
<i>Fectola unidentata</i> (Climo, 1978)	Charopidae	Endemic	1.31	3.00	0.44	3.00	1.98

Species <sup>1</sup>	Family	BioStatus	Shell height (H) (mm) <sup>2</sup>	Shell width (W) (mm)	Shell H:W	Specific maximum dimension (mm)	Mean observed maximum shell dimension (mm) <sup>3</sup>
<i>Flammocharopa accelerata</i> (Climo, 1970)	Charopidae	Endemic	1.25	2.60	0.48	2.60	1.71
<i>Flammocharopa costulata</i> (Hutton, 1882)	Charopidae	Endemic	2.00	3.70	0.54	3.70	2.45
<i>Flammulina chiron</i> (Gray, 1850)	Charopidae	Endemic	3.00	6.00	0.50	6.00	3.99
<i>Flammulina cornea</i> (Hutton, 1882)	Charopidae	Endemic	4.50	6.25	0.72	6.25	4.15
<i>Flammulina crebriflammis</i> (L. Pfeiffer, 1853)	Charopidae	Endemic	3.00	7.00	0.43	7.00	4.66
<i>Flammulina feredayi</i> (Suter 1891)	Charopidae	Endemic	2.00	3.50	0.57	3.50	2.31
<i>Flammulina perditia</i> (Hutton, 1883)	Charopidae	Endemic	4.50	8.00	0.56	8.00	5.33
<i>Flammulina zebra</i> (Le Guillou, 1842)	Charopidae	Endemic	5.00	7.00	0.71	7.00	4.66
<i>Geminoropa vortex</i> (R. Murdoch, 1897)	Charopidae	Endemic	0.75	1.60	0.47	1.60	1.04
<i>Granaliodiscus granum</i> (L. Pfeiffer, 1857)	Charopidae	Endemic	2.75	3.60	0.76	3.60	2.38
<i>Huonodon aorangi</i> (Suter, 1890)	Charopidae	Endemic	1.25	2.00	0.63	2.00	1.31
<i>Huonodon hectori</i> (Suter, 1890)	Charopidae	Endemic	1.20	2.25	0.53	2.25	1.47
<i>Huonodon microundulata</i> (Suter, 1890)	Charopidae	Endemic	1.25	2.00	0.63	2.00	1.31
<i>Huonodon pseudoleoidon</i> (Suter, 1890)	Charopidae	Endemic	1.50	2.40	0.63	2.40	1.57
<i>Mitodon wairarapa</i> (Suter, 1890)	Charopidae	Endemic	0.80	1.90	0.42	1.90	1.24
<i>Mocella eta</i> (L. Pfeiffer, 1853)	Charopidae	Endemic	1.50	3.20	0.47	3.20	2.11
<i>Mocella rakiura</i> (Powell, 1939)	Charopidae	Endemic	1.10	2.20	0.50	2.20	1.44
<i>Otoconcha dimidiata</i> (L. Pfeiffer, 1853)	Charopidae	Endemic	5.00	5.00	1.00	5.00	3.32
<i>Paracharopa chrysaugaia</i> (Webster, 1904)	Charopidae	Endemic	0.80	2.00	0.40	2.00	1.31
<i>Paracharopa fuscosa</i> (Suter, 1894)	Charopidae	Endemic	1.00	2.20	0.45	2.20	1.44
<i>Paracharopa goulstonei</i> (Climo, 1983)	Charopidae	Endemic	0.88	1.90	0.46	1.90	1.24
<i>Phacussa hypopolia</i> (L. Pfeiffer, 1853)	Charopidae	Endemic	4.00	7.00	0.57	7.00	4.66
<i>Phacussa prousei</i> (Powell, 1952)	Charopidae	Endemic	4.75	5.50	0.86	5.50	3.65
<i>Phenacharopa novoseelandica</i> (L. Pfeiffer, 1853)	Charopidae	Endemic	4.75	2.00	2.38	2.00	1.31
<i>Phenacharopa pseudanguicula</i> (Iredale, 1913)	Charopidae	Endemic	1.00	2.40	0.42	2.40	1.57
<i>Phenacohelix aurea</i> (Goulstone, 2001)	Charopidae	Endemic	3.30	2.90	1.14	2.90	1.91
<i>Phenacohelix giveni</i> (Cumber, 1961)	Charopidae	Endemic	4.00	6.30	0.63	6.30	4.19
<i>Phenacohelix hakarimata</i> (Goulstone, 2001)	Charopidae	Endemic	3.90	6.40	0.61	6.40	4.25
<i>Phenacohelix lucetta</i> (Hutton, 1884)	Charopidae	Endemic	4.50	7.50	0.60	7.50	4.99
<i>Phenacohelix perplexa</i> (R. Murdoch, 1897)	Charopidae	Endemic	5.00	8.00	0.63	8.00	5.33
<i>Phenacohelix pilula</i> (Reeve, 1852)	Charopidae	Endemic	3.80	5.70	0.67	5.70	3.79
<i>Phenacohelix ponsonbyi</i> (Suter, 1897)	Charopidae	Endemic	4.00	6.00	0.67	6.00	3.99
<i>Phenacohelix rusticus</i> (Suter, 1894)	Charopidae	Endemic	2.50	5.00	0.50	5.00	3.32
<i>Phenacohelix ziczac</i> (Gould, 1848)	Charopidae	Endemic	5.50	9.50	0.58	9.50	6.33
<i>Pseudegestula brookesi</i> (Dell, 1954)	Charopidae	Endemic	1.14	2.26	0.50	2.26	1.48
<i>Pseudegestula transenna</i> (Suter, 1904)	Charopidae	Endemic	1.40	3.20	0.44	3.20	2.11
<i>Pseudegestula worleyi</i> (Powell, 1928)	Charopidae	Endemic	2.42	3.08	0.79	3.08	2.03
<i>Ptychodon roscoei</i> (Climo, 1978)	Charopidae	Endemic	0.95	1.50	0.63	1.50	0.97
<i>Pulchridomus barbatulus</i> (Reeve, 1852)	Charopidae	Endemic	4.80	3.60	1.33	4.80	3.18
<i>Rotadiscus jamiesoni</i> (Climo, 1978)	Charopidae	Endemic	0.98	2.05	0.48	2.05	1.34
<i>Rotadiscus takakaensis</i> (Climo, 1981)	Charopidae	Endemic	1.12	2.69	0.42	2.69	1.77
<i>Serpho kivi</i> (Gray, 1843)	Charopidae	Endemic	9.50	12.00	0.79	12.00	8.01
<i>Suteria ide</i> (Gray, 1850)	Charopidae	Endemic	4.00	8.00	0.50	8.00	5.33
<i>Suteria raricostata</i> (Cumber, 1962)	Charopidae	Endemic	3.00	7.00	0.43	7.00	4.66
<i>Thalassohelix igniflua</i> (Reeve, 1852)	Charopidae	Endemic	8.75	15.50	0.56	15.50	10.35
<i>Thalassohelix zelandiae</i> (Gray, 1843)	Charopidae	Endemic	8.25	11.00	0.75	11.00	7.34
<i>Therasia decidua</i> (L. Pfeiffer, 1857)	Charopidae	Endemic	7.00	9.50	0.74	9.50	6.33
<i>Therasia thaisa</i> (Hutton, 1883)	Charopidae	Endemic	8.00	10.25	0.78	10.25	6.83
<i>Therasia traversi</i> (EA Smith, 1884)	Charopidae	Endemic	8.00	12.50	0.64	12.50	8.34
<i>Therasia valeria</i> (Hutton, 1883)	Charopidae	Endemic	3.75	6.25	0.60	6.25	4.15
<i>Therasiella celinde</i> (Gray, 1850)	Charopidae	Endemic	3.40	4.40	0.77	4.40	2.91
<i>Therasiella elevata</i> (Cumber, 1967)	Charopidae	Endemic	2.00	3.50	0.57	3.50	2.31
<i>Therasiella neozelanica</i> (Cumber, 1967)	Charopidae	Endemic	2.00	4.00	0.50	4.00	2.65
<i>Therasiella serrata</i> (Cumber, 1967)	Charopidae	Endemic	1.60	3.20	0.50	3.20	2.11
<i>Therasiella tamora</i> (Hutton, 1883)	Charopidae	Endemic	3.00	5.00	0.60	5.00	3.32
<i>Thermia subincarnata</i> (Suter, 1894)	Charopidae	Endemic	5.50	8.50	0.65	8.50	5.66
<i>Thermia virescens</i> (Suter, 1899)	Charopidae	Endemic	5.50	9.00	0.61	9.00	6.00
<i>Cochlicopa lubrica</i> (Müller, 1774)	Cochlicopidae	Exotic adventive	7.80	2.40	3.25	7.80	5.19
<i>Georissa purchasi</i> (Pfeiffer, 1862)	Hydrocenidae	Endemic	2.00	1.00	2.00	2.00	1.31
<i>Kokikora angulata</i> (Climo & Goulstone, 1995)	Punctidae	Endemic	1.73	2.40	0.72	2.40	1.57
<i>Kokopapa unispatulata</i> (Climo & Mahlfeld, 2011)	Punctidae	Endemic	2.90	3.10	0.94	3.10	2.04
<i>Laoma leimonias</i> (Gray, 1850)	Punctidae	Endemic	3.00	2.30	1.30	3.00	1.98
<i>Laoma mariae</i> (Gray, 1843)	Punctidae	Endemic	4.50	8.00	0.56	8.00	5.33
<i>Laoma marina</i> (Hutton, 1883)	Punctidae	Endemic	3.00	3.50	0.86	3.50	2.31
<i>Obanella rimutaka</i> (Dell, 1952)	Punctidae	Endemic	1.30	2.00	0.65	2.00	1.31
<i>Obanella spectabilis</i> (Powell, 1928)	Punctidae	Endemic	0.70	1.50	0.47	1.50	0.97
<i>Paralaoma allochroida</i> (Suter, 1890)	Punctidae	Endemic	1.18	1.58	0.75	1.58	1.03

Species <sup>1</sup>	Family	BioStatus	Shell height (H) (mm) <sup>2</sup>	Shell width (W) (mm)	Shell H:W	Specific maximum dimension (mm)	Mean observed maximum shell dimension (mm) <sup>3</sup>
<i>Paralaoma lateumbilicata</i> (Suter, 1890)	Punctidae	Endemic	1.00	1.50	0.67	1.50	0.97
<i>Paralaoma miserabilis</i> (Iredale, 1913)	Punctidae	Native	0.80	1.50	0.53	1.50	0.97
<i>Paralaoma raricostata</i> (Suter, 1890)	Punctidae	Endemic	1.00	2.00	0.50	2.00	1.31
<i>Paralaoma sericata</i> (Suter, 1890)	Punctidae	Endemic	0.80	1.25	0.64	1.25	0.80
<i>Paralaoma serratocostata</i> (Webster, 1906)	Punctidae	Endemic	0.70	1.20	0.58	1.20	0.77
<i>Paralaoma servilis</i> (Shuttleworth, 1852)	Punctidae	Native	1.30	2.80	0.46	2.80	1.84
<i>Paralaoma thomsoni</i> (Suter, 1917)	Punctidae	Endemic	1.30	1.90	0.68	1.90	1.24
<i>Pasmaditta jungermanniae</i> (Petterd, 1879)	Punctidae	Native	1.30	2.50	0.52	2.50	1.64
<i>Phrixgnathus alfredi</i> (Suter, 1909)	Punctidae	Endemic	1.60	2.50	0.64	2.50	1.64
<i>Phrixgnathus ariel</i> (Hutton, 1883)	Punctidae	Endemic	2.50	3.25	0.77	3.25	2.14
<i>Phrixgnathus brunneus</i> (Climo & Goulstone, 1993)	Punctidae	Endemic	1.30	2.50	0.52	2.50	1.64
<i>Phrixgnathus celia</i> (Hutton, 1883)	Punctidae	Endemic	2.50	4.00	0.63	4.00	2.65
<i>Phrixgnathus cheesemani</i> (Suter, 1894)	Punctidae	Endemic	3.00	4.50	0.67	4.50	2.98
<i>Phrixgnathus conella</i> (Pfeiffer, 1862)	Punctidae	Endemic	2.80	3.50	0.80	3.50	2.31
<i>Phrixgnathus douglasi</i> (Climo & Goulstone, 1993)	Punctidae	Endemic	1.40	1.20	1.17	1.20	0.77
<i>Phrixgnathus erigone</i> (Gray, 1850)	Punctidae	Endemic	2.25	2.00	1.13	2.25	1.47
<i>Phrixgnathus forsteri</i> (Dell, 1952)	Punctidae	Endemic	1.60	2.60	0.62	2.60	1.71
<i>Phrixgnathus fulguratus</i> (Suter, 1909)	Punctidae	Endemic	2.00	3.20	0.63	3.20	2.11
<i>Phrixgnathus glabriusculus</i> (Pfeiffer, 1853)	Punctidae	Endemic	2.00	3.50	0.57	3.50	2.31
<i>Phrixgnathus larochei</i> (Powell, 1928)	Punctidae	Endemic	2.25	2.30	0.98	2.30	1.51
<i>Phrixgnathus levis</i> (Suter, 1913)	Punctidae	Endemic	2.50	3.75	0.67	3.75	2.48
<i>Phrixgnathus marginatus</i> (Hutton, 1882)	Punctidae	Endemic	2.50	3.75	0.67	3.75	2.48
<i>Phrixgnathus microreticulatus</i> (Suter, 1890)	Punctidae	Endemic	1.30	1.70	0.76	1.70	1.11
<i>Phrixgnathus moellendorffi</i> (Suter, 1896)	Punctidae	Endemic	1.80	3.00	0.60	3.00	1.98
<i>Phrixgnathus phrynia</i> (Hutton, 1883)	Punctidae	Endemic	2.41	3.50	0.69	3.50	2.31
<i>Phrixgnathus pirongiaensis</i> (Suter, 1894)	Punctidae	Endemic	1.90	2.00	0.95	2.00	1.31
<i>Phrixgnathus poecilosticta</i> (Pfeiffer, 1853)	Punctidae	Endemic	3.25	4.00	0.81	4.00	2.65
<i>Phrixgnathus ruforadiatus</i> (Gardner, 1972)	Punctidae	Endemic	1.25	1.75	0.71	1.75	1.14
<i>Phrixgnathus sciadium</i> (Pfeiffer, 1857)	Punctidae	Endemic	3.40	6.20	0.55	6.20	4.12
<i>Phrixgnathus subluclidus</i> (Suter, 1896)	Punctidae	Endemic	2.00	3.00	0.67	3.00	1.98
<i>Phrixgnathus trailli</i> (Suter, 1909)	Punctidae	Endemic	3.20	4.50	0.71	4.50	2.98
<i>Phrixgnathus transitans</i> (Suter, 1892)	Punctidae	Endemic	1.90	3.00	0.63	3.00	1.98
<i>Phrixgnathus viridulus</i> (Suter, 1909)	Punctidae	Endemic	1.77	2.41	0.73	2.41	1.58
Punctidae sp. 10 (M.78607)	Punctidae	Endemic	0.61	1.00	0.61	1.00	0.64
Punctidae sp. 100 (M.84972)	Punctidae	Endemic	0.80	1.30	0.62	1.30	0.84
Punctidae sp. 102 (M.85773)	Punctidae	Endemic	0.50	0.90	0.56	0.90	0.57
Punctidae sp. 11 (M.88137)	Punctidae	Endemic	1.45	2.22	0.65	2.22	1.45
Punctidae sp. 115 (M.25238)	Punctidae	Endemic	1.00	2.00	0.50	2.00	1.31
Punctidae sp. 117 (M.77714)	Punctidae	Endemic	1.30	1.70	0.76	1.70	1.11
Punctidae sp. 119 (M.14534)	Punctidae	Endemic	1.84	2.08	0.88	2.08	1.36
Punctidae sp. 121 (M.57797)	Punctidae	Endemic	1.11	1.54	0.72	1.54	1.00
Punctidae sp. 128 (M.88158)	Punctidae	Endemic	2.10	2.37	0.89	2.37	1.55
Punctidae sp. 129 (M.88157)	Punctidae	Endemic	1.10	1.48	0.74	1.48	0.96
Punctidae sp. 133 (M.62141)	Punctidae	Endemic	1.37	1.97	0.70	1.97	1.29
Punctidae sp. 140 (M.29067)	Punctidae	Endemic	1.73	2.33	0.74	2.33	1.53
Punctidae sp. 143 (M.68770)	Punctidae	Endemic	2.40	3.33	0.72	3.33	2.20
Punctidae sp. 144 (M.88107)	Punctidae	Endemic	0.95	1.50	0.63	1.50	0.97
Punctidae sp. 145 (M.88110)	Punctidae	Endemic	1.05	1.50	0.70	1.50	0.97
Punctidae sp. 146 (M.88148)	Punctidae	Endemic	1.51	2.54	0.59	2.54	1.67
Punctidae sp. 149 (M.98347)	Punctidae	Endemic	1.20	1.52	0.79	1.52	0.98
Punctidae sp. 151 (M.38683)	Punctidae	Endemic	1.52	2.82	0.54	2.82	1.86
Punctidae sp. 157 (M.58191)	Punctidae	Endemic	0.82	1.55	0.53	1.55	1.01
Punctidae sp. 16 (M.88166)	Punctidae	Endemic	1.10	1.78	0.62	1.78	1.16
Punctidae sp. 171 (M.83431)	Punctidae	Endemic	1.10	1.50	0.73	1.50	0.97
Punctidae sp. 186 (M.57571)	Punctidae	Endemic	0.80	1.40	0.57	1.40	0.90
Punctidae sp. 188 (M.78582)	Punctidae	Endemic	0.80	1.20	0.67	1.20	0.77
Punctidae sp. 196 (M.103034)	Punctidae	Endemic	0.88	1.18	0.75	1.18	0.76
Punctidae sp. 199 (M.92849)	Punctidae	Endemic	1.30	2.00	0.65	2.00	1.31
Punctidae sp. 199 (M.92849)	Punctidae	Endemic	1.30	2.00	0.65	2.00	1.31
Punctidae sp. 203 (M.109730)	Punctidae	Endemic	0.78	1.08	0.72	1.08	0.69
Punctidae sp. 204 (M.129156)	Punctidae	Endemic	1.00	1.40	0.71	1.40	0.90
Punctidae sp. 216 (M.47067)	Punctidae	Endemic	0.80	1.70	0.47	1.70	1.11
Punctidae sp. 216 (M.47067)	Punctidae	Endemic	0.80	1.70	0.47	1.70	1.11
Punctidae sp. 22 (M.88149)	Punctidae	Endemic	0.78	1.20	0.65	1.20	0.77
Punctidae sp. 225 (M.98351)	Punctidae	Endemic	1.00	2.00	0.50	2.00	1.31
Punctidae sp. 242 (M.83495)	Punctidae	Endemic	0.96	1.32	0.73	1.32	0.85
Punctidae sp. 243 (M.61602)	Punctidae	Endemic	1.15	1.88	0.61	1.88	1.23
Punctidae sp. 246 (M.37005)	Punctidae	Endemic	0.80	1.10	0.73	1.10	0.70

Species <sup>1</sup>	Family	BioStatus	Shell height (H) (mm) <sup>2</sup>	Shell width (W) (mm)	Shell H:W	Specific maximum dimension (mm)	Mean observed maximum shell dimension (mm) <sup>3</sup>
Punctidae sp. 247 (M.25419)	Punctidae	Endemic	0.88	1.39	0.63	1.39	0.90
Punctidae sp. 253 (M.69812)	Punctidae	Endemic	0.73	1.00	0.73	1.00	0.64
Punctidae sp. 255 (M.63384)	Punctidae	Endemic	1.00	1.27	0.79	1.27	0.82
Punctidae sp. 258 (M.88136)	Punctidae	Endemic	1.70	2.90	0.59	2.90	1.91
Punctidae sp. 40 (M.88216)	Punctidae	Endemic	1.95	3.00	0.65	3.00	1.98
Punctidae sp. 56 (M.62133)	Punctidae	Endemic	1.20	2.40	0.50	2.40	1.57
Punctidae sp. 57 (M.58133)	Punctidae	Endemic	1.95	3.00	0.65	3.00	1.98
Punctidae sp. 59 (M.65253)	Punctidae	Endemic	1.68	2.50	0.67	2.50	1.64
Punctidae sp. 62 (M.62504)	Punctidae	Endemic	0.95	1.10	0.86	1.10	0.70
Punctidae sp. 64 (M.68410)	Punctidae	Endemic	1.95	3.00	0.65	3.00	1.98
Punctidae sp. 70 (M.56634)	Punctidae	Endemic	1.16	1.29	0.90	1.29	0.83
Punctidae sp. 71 (M.77798)	Punctidae	Endemic	0.88	1.10	0.80	1.10	0.70
Punctidae sp. 72 (M.93105)	Punctidae	Endemic	1.05	1.24	0.85	1.24	0.80
Punctidae sp. 81 (M.68844)	Punctidae	Endemic	0.50	0.90	0.56	0.90	0.57
Punctidae sp. 86 (M.70256)	Punctidae	Endemic	1.05	1.63	0.64	1.63	1.06
Punctidae sp. 96 (M.80251)	Punctidae	Endemic	1.36	1.29	1.05	1.29	0.83
Punctidae sp. 97 (M.86586)	Punctidae	Endemic	1.87	2.88	0.65	2.88	1.90
Punctidae sp. 98 (M.61626)	Punctidae	Endemic	1.10	1.30	0.85	1.30	0.84
<i>Taguahelix campbellica</i> (Filhol, 1880)	Punctidae	Endemic	2.20	3.00	0.73	3.00	1.98
<i>Taguahelix crispata</i> (Climo & Goulstone, 1993)	Punctidae	Endemic	1.90	2.50	0.76	2.50	1.64
<i>Taguahelix elaiodes</i> (Webster, 1904)	Punctidae	Endemic	2.00	3.00	0.67	3.00	1.98
<i>Taguahelix francesci</i> (Webster, 1904)	Punctidae	Endemic	1.81	1.60	1.13	1.60	1.04
<i>Cytora chiltoni</i> (Suter, 1896)	Pupinidae	Endemic	3.00	2.25	1.33	3.00	1.98
<i>Cytora cytora</i> (Gray, 1850)	Pupinidae	Endemic	2.80	2.70	1.04	2.80	1.84
<i>Cytora depressa</i> (Gardner, 1968)	Pupinidae	Endemic	2.25	4.00	0.56	4.00	2.65
<i>Cytora hazelwoodi</i> (Marshall & Barker, 2007)	Pupinidae	Endemic	2.03	1.46	1.39	2.03	1.33
<i>Cytora hedleyi</i> (Suter, 1894)	Pupinidae	Endemic	2.40	2.30	1.04	2.40	1.57
<i>Cytora kamura</i> (Marshall & Barker, 2007)	Pupinidae	Endemic	3.85	3.21	1.20	3.85	2.55
<i>Cytora maui</i> (Marshall & Barker, 2007)	Pupinidae	Endemic	2.90	2.32	1.25	2.9	1.91
<i>Cytora pallida</i> (Hutton, 1883)	Pupinidae	Endemic	6.00	4.00	1.50	6.00	3.99
<i>Cytora pannosa</i> (Hutton, 1882)	Pupinidae	Endemic	4.00	3.25	1.23	4.00	2.65
<i>Cytora septentrionale</i> (Suter, 1907)	Pupinidae	Endemic	6.25	4.69	1.33	6.25	4.15
<i>Cytora tokerau</i> (Marshall & Barker, 2007)	Pupinidae	Endemic	2.60	1.43	1.82	2.60	1.71
<i>Cytora torquilla</i> (Suter, 1894)	Pupinidae	Endemic	2.50	1.75	1.43	2.50	1.64
<i>Cytora tuarua</i> (Marshall & Barker, 2007)	Pupinidae	Endemic	2.85	2.14	1.33	2.85	1.88
<i>Liarea egea</i> (Gray, 1850)	Pupinidae	Endemic	7.30	4.50	1.62	7.30	4.86
<i>Liarea hochstetteri carinella</i> (Pfeiffer, 1861)	Pupinidae	Endemic	8.70	5.50	1.58	8.70	5.80
<i>Liarea hochstetteri hochstetteri</i> (Pfeiffer, 1861)	Pupinidae	Endemic	10.10	5.80	1.74	10.10	6.73
<i>Liarea turriculata</i> (Pfeiffer, 1855)	Pupinidae	Endemic	11.00	5.20	2.12	11.00	7.34
<i>Amborhytida dunniae</i> (Gray, 1840)	Rhytididae	Endemic	14.50	30.00	0.48	30.00	20.07
<i>Amborhytida forsythi</i> (Powell, 1952)	Rhytididae	Endemic	7.25	13.50	0.54	13.50	9.01
<i>Delos coresia</i> (Gray, 1850)	Rhytididae	Endemic	1.80	4.20	0.43	4.20	2.78
<i>Delos jeffreysiana</i> (Pfeiffer, 1853)	Rhytididae	Endemic	3.00	7.00	0.43	7.00	4.66
<i>Paryphanta busbyi busbyi</i> (Gray, 1850)	Rhytididae	Endemic	44.00	79.00	0.56	79.00	52.90
<i>Rhytida greenwoodi greenwoodi</i> (Gray, 1850)	Rhytididae	Endemic	17.00	27.00	0.63	27.00	18.06
<i>Rhytida greenwoodi webbi</i> (Powell, 1949)	Rhytididae	Endemic	13.50	26.50	0.63	26.50	17.72
<i>Rhytida meesoni perampla</i> (Powell, 1946)	Rhytididae	Endemic	8.50	15.00	0.57	15.00	10.02
<i>Rhytida oconnori</i> (Powell, 1946)	Rhytididae	Endemic	19.00	33.00	0.58	33.00	22.08
<i>Rhytida patula</i> (Hutton, 1882)	Rhytididae	Endemic	12.00	28.00	0.43	28.00	18.73
<i>Schizoglossa novoseelandica</i> (Pfeiffer, 1862)	Rhytididae	Endemic	15.00	22.00	0.68	22.00	14.71
<i>Oxychilus cellarius</i> (Müller, 1774)	Zonitidae	Exotic adventive	5.00	10.00	0.50	10.00	6.67

1. Nomenclature follows Spencer et al. (2009)

2. Shell dimension data from G.M. Barker (unpubl.)

3. Averaged across the nine locations, for 'live-collected' specimens only.

**Table S3.** Sources of data on rat tracking index (RTI) for ship rat and Norway rat abundance monitored in paired forest blocks at nine locations where rats were either intensively managed (T) and not (NT).

Location	Sources of data on RTI
Trounson	Department of Conservation (Coad NJ) 2001. Trounson Kauri Park Annual Report 1999–2000. Northland Conservancy. Whangarei, New Zealand, Department of Conservation. Department of Conservation 2012. Trounson Kauri Park Mainland Island Annual Report 2009–2010. Northland Conservancy. Whangarei, New Zealand, Department of Conservation. Gillies CA, Graham P[J] 2000. Predator and rodent responses in managed Northland forests. In: Trounson Kauri Park annual report 1999-2000. Northland Conservancy. Whangarei, New Zealand, Department of Conservation. Pp. 67–74. Gillies CA, Leach MR, Coad NB, Theobald SW, Campbell J, Herbert T, Graham PJ, Pierce RJ 2003. Six years of intensive pest mammal control at Trounson Kauri Park, a Department of Conservation “mainland island”, June 1996—July 2002. <i>New Zealand Journal of Zoology</i> 30: 399–420. Gillies C[A], Styche A, Bradfield P, Chalmers K, Leach M, Murphy E, Ward-Smith T, Warne R 2006. Diphacinone bait for ground control of rats on mainland conservation land. <i>Science for Conservation</i> 270. Wellington, New Zealand, Department of Conservation. 20 p.
Waitakere	King PA 2007. The effects of rodents on ground dwelling arthropods in the Waitakere Ranges. Unpublished MSc thesis. Auckland, New Zealand, Auckland University of Technology. 179 p. Martineau A 2010. Management and predator control in a ‘Mainland Island’ ecosystem: assessment of rodent control efficiency. Unpublished Report. France, Marseille, University Paul-Cezanne Aix-Marseille 3. Sumich J 2007. Personal communication. Auckland, New Zealand, Ark in the Park project, Management Committee.
Moehau	Gillies C[A], Styche A, Bradfield P, Chalmers K, Leach M, Murphy E, Ward-Smith T, Warne R 2006. Diphacinone bait for ground control of rats on mainland conservation land. <i>Science for Conservation</i> 270. Wellington, New Zealand, Department of Conservation. 20 p. Overdyck O 2008. Personal communication. Hamilton, New Zealand, Waikato Area Office. Rate SR 2009. Does rat control benefit forest invertebrates at Moehau, Coromandel Peninsula? DOC Research & Development Series 316. Wellington, New Zealand, Department of Conservation. 26 p.
Te Urewera	Baigent D 2015. Personal communication. Opotiki, New Zealand, Department of Conservation, Opotiki Area Office. Carlton D 2008, 2015. Personal communication. Hawke's Bay Conservancy. Gisborne, New Zealand, Department of Conservation. Wilson L 2008. Personal communication. Opotiki Area Office. Opotiki, New Zealand, Department of Conservation. Moorcroft G, Allerby T, Baigent D, Barsdell J, Gebert S, Glaser A, Livingstone P, Kirk A, Haxton J, Thyne C 2010. Te Urewera Mainland Island Annual Report: July 2008 – June 2009. East Coast Bay of Plenty Conservancy. Rotorua, New Zealand, Department of Conservation.
Ruakuri	Smith DW 2007, 2008, 2015. Personal communication. Maniapoto Area Office. Te Kuiti, New Zealand, Department of Conservation.
Wharerino	Daglish L 2008. Personal communication. Maniapoto Area Office. Te Kuiti, New Zealand, Department of Conservation. Quinnell A 2015. Personal communication. Maniapoto Area Office. Te Kuiti, New Zealand, Department of Conservation. Smith DW 2007, 2008, 2015. Personal communication. Maniapoto Area Office. Te Kuiti, New Zealand, Department of Conservation.
Pukawa	King C, Scurr D 2013. Efficacy of a community-led rat control programme at Lake Taupo, New Zealand. <i>Conservation Evidence</i> 10: 84–88. Loe K 2014. Personal communication. Tongariro/Taupo Conservancy. Turangi, New Zealand, Department of Conservation. Poutu N 2008. Personal communication. Tongariro/Taupo Conservancy. Turangi, New Zealand, Department of Conservation. Stanley J 2008. Personal communication. Pukawa Bay, Turangi, New Zealand, Pukawa Wildlife Management Trust.
Boundary Stream	Carlton D 2008, 2015. Personal communication. East Coast Hawke's Bay Conservancy. Gisborne, New Zealand, Department of Conservation. Department of Conservation 2000. Boundary Stream Mainland Island 1998-2000 Project Report. East Coast Hawke's Bay Conservancy. Gisborne, New Zealand, Department of Conservation. 163 pp. Department of Conservation 2000. Field trial of ‘Feracol’ (Cholecalciferol) for the purpose of rat control in Boundary Stream Mainland Island (June to August 2000). East Coast Hawke's Bay Conservancy. Napier, New Zealand, Department of Conservation. 5 p. Department of Conservation 2002. Boundary Stream Mainland Island Project Report 2001 to 2002. East Coast Hawke's Bay Conservancy. Napier, New Zealand, Department of Conservation. 76 p. Department of Conservation 2003. Operational report for Norway rat, ship rat control in the Boundary Stream Scenic Reserve (mainland island) 01 Aug 1998-01 Mar 1999 (Pestlink report). East Coast Hawke's Bay Conservancy. Napier, New Zealand, Department of Conservation. 15 p. Department of Conservation (Ward-Smith T, King S, Sullivan W) 2004. Boundary Stream Mainland Island project report 2002 to 2003. Annual Report. East Coast Hawke's Bay Conservancy. Gisborne, New Zealand, Department of Conservation. 79 p.

Location	Sources of data on RTI
	<p>Department of Conservation 2005. Boundary Stream Mainland Island 2003-04 Annual Report. East Coast Hawke's Bay Conservancy. Napier, New Zealand, Department of Conservation.</p> <p>Department of Conservation (Ward-Smith T, Sullivan W, Nakagawa K, Abbott P, Macdonald P, Stephenson B, Longanecker A) 2006. Boundary Stream Mainland Island 2004-05 Annual Report. Hawke's Bay Conservancy. Napier, New Zealand, Department of Conservation East Coast.</p> <p>Department of Conservation 2007. Boundary Stream Mainland Island Annual Report 2005-2006. East Coast Hawke's Bay Conservancy. Napier, New Zealand, Department of Conservation.</p> <p>Department of Conservation 2008. Boundary Stream Mainland Island Strategic Plan: 2008 to 2018. East Coast Hawke's Bay Conservancy. Gisborne, New Zealand, Department of Conservation.</p> <p>Fastier D 2008. Personal communication. East Coast Hawke's Bay Conservancy, Boundary Stream Mainland Island. Gisborne, New Zealand, Department of Conservation.</p> <p>Gillies CA, Innes JG, Overton JM, Barker GM 2010. A review of conservation outcomes from Mainland Islands. Progress Report. Sanctuaries of New Zealand workshop: Great Barrier Island 2010. 25 p.</p> <p>Gillies C[A], Styche A, Bradfield P, Chalmers K, Leach M, Murphy E, Ward-Smith T, Warne R 2006. Diphacinone bait for ground control of rats on mainland conservation land. Science for Conservation 270. Wellington, New Zealand, Department of Conservation. 20 p.</p> <p>Wessel S 2008. Spatial distribution of the rodent population at Boundary Stream Mainland Island and determination of the efficacy of different baits used for rodent control. Master of International Nature Conservation thesis. Lincoln University, Lincoln, New Zealand.</p>
Takaka	<p>Ogle M 2007, 2015. Personal communication. Golden Bay Area Office. Takaka, New Zealand, Department of Conservation.</p>

**Table S3.** Community-level metrics (means  $\pm$  SE) for all ('dead-collected' and 'live-collected') land snails sampled in paired forest blocks at nine locations where ship rat and Norway rat were either intensively managed (T) and not (NT), with Standardized Effect Size (SES) estimated from null models.

Location	Abundance/plot		Species richness/plot		Percent of plots occupied/species		Within- and between-treatment Bray-Curtis dissimilarity			Proportion specimens 'live-collected'	
	T	NT	T	NT	T	NT	T	NT	T vs NT	T	NT
Trounson	1166 $\pm$ 70	1195 $\pm$ 119	52.4	49.1	72.1	75.0	0.176	0.159	0.187	0.73	0.75
Waitakere	1575 $\pm$ 86	1572 $\pm$ 125	68.4	71.4	59.3	62.6	0.185	0.179	0.214	0.82	0.79
Moehau	1207 $\pm$ 84	1274 $\pm$ 140	50.0	50.2	59.0	63.2	0.191	0.183	0.205	0.68	0.64
Te Urewera	1227 $\pm$ 74	1206 $\pm$ 121	54.2	56.7	82.2	87.1	0.146	0.140	0.156	0.71	0.67
Ruakuri	1956 $\pm$ 98	2073 $\pm$ 207	69.5	63.8	73.7	70.8	0.164	0.154	0.171	0.69	0.62
Wharerino	2038 $\pm$ 122	2202 $\pm$ 286	59.6	59.2	67.2	68.0	0.127	0.116	0.123	0.82	0.78
Pukawa	1432 $\pm$ 86	1780 $\pm$ 60	70.0	66.2	83.0	86.4	0.165	0.149	0.254	0.69	0.70
Boundary Str.	976 $\pm$ 73	959 $\pm$ 124	52.4	53.8	76.7	74.1	0.148	0.142	0.166	0.78	0.75
Takaka	678 $\pm$ 44	754 $\pm$ 60	55.6	54.6	54.4	59.1	0.202	0.196	0.228	0.80	0.79
All locations	1362 $\pm$ 82	1446 $\pm$ 138	59.8	58.67	69.7	71.8	0.167	0.158	0.189	0.747	0.721
SES	-0.496	P=0.396	-0.605	P=0.171	-0.527	P=0.333	-0.247	P=0.403		-0.186	P=0.373

**Table S4.** Whole community-level abundance, richness and functional trait values for all ('dead-collected' and 'live-collected') land snails sampled in paired forest blocks at nine locations where ship rat and Norway rat were either intensively managed (T) and not (NT), with Standardized Effect Size (SES) estimated from null models.

Location	Abundance			Species richness <sup>1</sup>			Mean shell maximum dimension (mm)			Community-level functional trait values		
	T	NT	SES	T	NT	SES	T	NT	SES	T	NT	SES
Trounson	5829	5977	-0.652, P=0.186	72.8	65.5	<b>5.659, P&lt;0.001</b>	1.99	1.63	-0.650, P=0.129	11620	9734	-0.225, P=0.406
Waitakere	7875	7859	-0.811, P=0.345	116.0	115.2	1.231, P=0.223	2.29	1.90	-0.357, P=0.103	18019	14928	-0.230, P=0.426
Moehau	6036	6370	-0.695, P=0.156	84.7	79.7	1.623, P=0.228	2.02	1.60	-1.306, P=0.055	12220	10226	-0.307, P=0.456
Te Urewera	6136	6028	-0.780, P=0.146	66.1	65.2	1.281, P=0.201	1.88	1.56	-1.346, P=0.059	11518	9400	-0.274, P=0.569
Ruakuri	9781	10365	-0.843, P=0.149	95.2	91.1	1.544, P=0.132	2.08	1.70	-0.754, P=0.084	20306	17641	-0.582, P=0.383
Wharerino	10191	11009	-0.987, P=0.230	89	87	1.333, P=0.216	1.81	1.58	-0.678, P=0.186	18485	17430	-0.955, P=0.180
Pukawa	7159	8898	-0.531, P=0.419	84.3	77.0	<b>17.046, P&lt;0.001</b>	1.99	1.57	-0.546, P=0.062	14242	13998	-0.797, P=0.055
Boundary Str.	4882	4794	-0.698, P=0.167	69.0	72.7	1.380, P=0.234	1.56	1.38	-0.582, P=0.336	7639	6641	-0.570, P=0.634
Takaka	3389	3769	0.563, P=0.375	102.9	92.5	<b>4.240, P&lt;0.001</b>	2.31	2.03	-0.865, P=0.234	7817	7670	-0.695, P=0.065
All locations	6809	7230	-0.543, P=0.292	86.1	82.0	-0.438, P=0.393	1.99	1.66	5.052, <b>P=0.007</b>	13541	11963	-0.332, P=0.524

1. Aggregate richness over five sampling sites within forest block at the location, estimated by Chao1.



**Table S5.** Abundance, richness and functional trait values for all ('dead-collected' and 'live-collected') larger land snails (adult shell size  $\geq 4.0$  mm) sampled in paired forest blocks at nine locations where ship rat and Norway rat were either intensively managed (T) and not (NT), with Standardized Effect Size (SES) estimated from null models.

Location	Abundance			Species richness			Mean shell maximum dimension (mm)			Community-level functional trait values		
	T	NT	SES	T	NT	SES	T	NT	SES	T	NT	SES
Trounson	902	457	<b>3.427,</b> <b>P=0.015</b>	23	21	<b>5.228,</b> <b>P&lt;0.004</b>	5.41	4.61	<b>7.337,</b> <b>P&lt;0.001</b>	4878	2109	2.503, <b>P=0.032</b>
Waitakere	1748	950	<b>4.126,</b> <b>P=0.010</b>	32	30	<b>2.001,</b> <b>P=0.005</b>	4.76	4.37	<b>3.425,</b> <b>P=0.009</b>	8319	4154	2.877, <b>P=0.024</b>
Moehau	1002	346	<b>4.563,</b> <b>P=0.002</b>	27	24	1.113, P=0.304	4.90	4.06	<b>6.315,</b> <b>P=0.001</b>	4905	1405	5.773, <b>P=0.002</b>
Te Urewera	1025	520	<b>3.103,</b> <b>P=0.021</b>	18	17	<b>3.391,</b> <b>P=0.028</b>	4.59	4.06	<b>5.274,</b> <b>P&lt;0.001</b>	4704	2111	2.297, <b>P=0.040</b>
Ruakuri	1806	861	<b>4.345,</b> <b>P=0.008</b>	33	31	1.772, P=0.225	4.91	4.58	<b>4.756,</b> <b>P=0.011</b>	8866	3945	<b>3.324,</b> <b>P=0.020</b>
Wharerino	1317	742	<b>3.366,</b> <b>P=0.017</b>	37	36	<b>8.618,</b> <b>P&lt;0.001</b>	4.82	4.50	<b>3.329,</b> <b>P=0.008</b>	6346	3343	2.789, <b>P=0.024</b>
Pukawa	1153	529	<b>5.076,</b> <b>P=0.003</b>	28	25	<b>8.002,</b> <b>P&lt;0.001</b>	5.13	4.82	<b>3.215,</b> <b>P=0.015</b>	5919	2551	3.556, <b>P=0.013</b>
Boundary Str.	429	178	<b>3.850,</b> <b>P=0.008</b>	22	21	<b>7.638,</b> <b>P&lt;0.001</b>	4.94	4.54	<b>5.620,</b> <b>P=0.002</b>	2119	808	2.661, <b>P=0.029</b>
Takaka	868	721	-0.458, P=0.454	33	29	<b>14.056,</b> <b>P&lt;0.001</b>	4.56	4.11	<b>5.426,</b> <b>P&lt;0.001</b>	3957	2962	-0.015, P=0.335
All locations	1139	589	<b>5.168,</b> <b>P=0.005</b>	28.1	26.0	-0.340, P=0.489	4.89	4.41	7.804, <b>P=0.002</b>	5557	2599	-8.321, <b>P&lt;0.001</b>

**Figure S1.** Individual-based rarefaction curves showing the cumulative number of ‘live-collected’ land-snail species at nine locations in which rats were either intensively managed (●) or not (○).

