

Supplementary materials

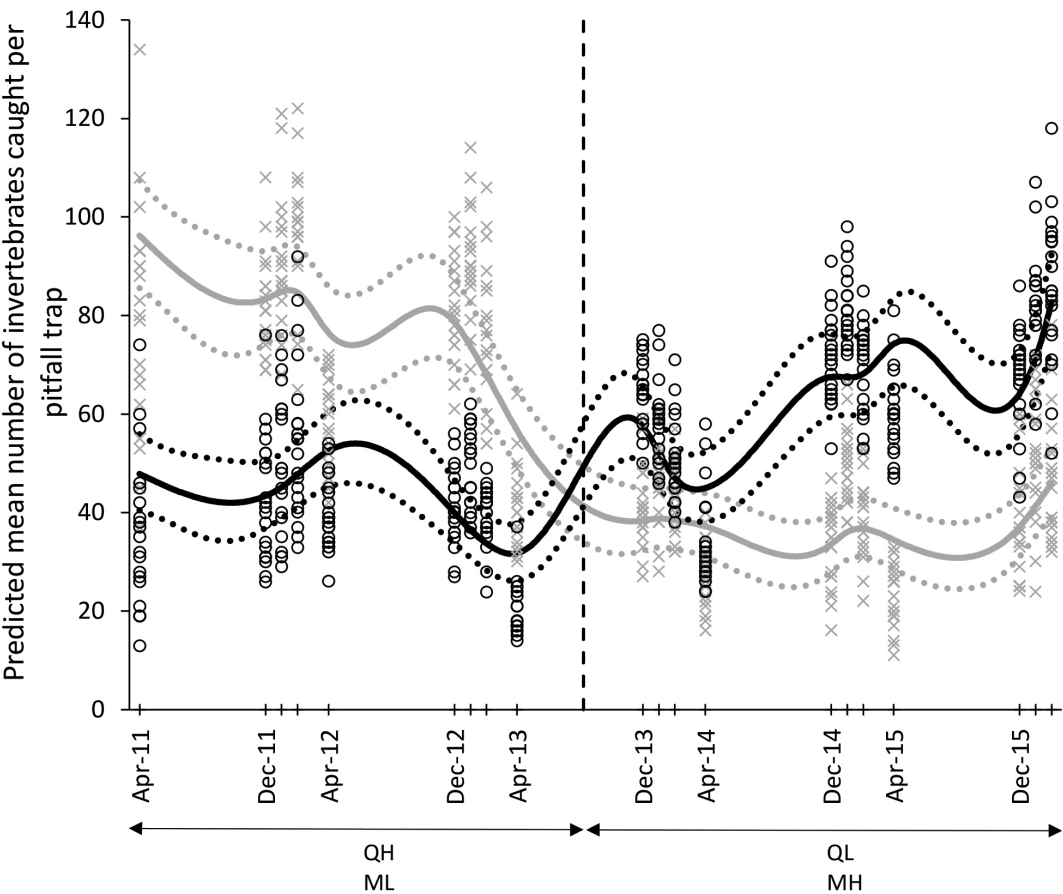
Appendix S1. Beetle species (RTUs) caught in pitfall traps in Q and M blocks within Sanctuary Mountain Maungatautari.

Family	Species	Family	Species
Anthicidae	<i>Cotes optima</i>	Curculionidae	<i>Psepholax</i> sp(p.)
Anthicidae	<i>Cotes</i> sp. 1	Curculionidae	<i>Rhynchodes ursus</i>
Byrrhidae	<i>Synorthus</i> sp(p.)	Curculionidae	<i>Scelodolichus</i> spp.
Carabidae	<i>Allocinopus smithi</i>	Curculionidae	<i>Scolopterus aequus</i>
Carabidae	<i>Amarotypus edwardsi</i>	Curculionidae	<i>Sitona lepidus</i>
Carabidae	<i>Aulacopodus calathoides</i>	Curculionidae	<i>Styphlotelus fascicularis</i>
Carabidae	<i>Ctenognathus adamsi</i>	Curculionidae	<i>Sympedius</i> sp(p.)
Carabidae	<i>Ctenognathus sulcicarsis</i>	Curculionidae	<i>Trinodocalles conicollis</i>
Carabidae	<i>Dicrochile</i> sp. 1	Curculionidae	<i>Tropiphorini</i> sp. 1
Carabidae	<i>Holcaspis mordax</i>	Curculionidae	<i>Tychanopais</i> sp(p.)
Carabidae	<i>Mecodema crenaticolle</i>	Curculionidae	<i>Tychanus</i> sp(p.)
Carabidae	<i>Mecodema occiputale</i>	Curculionidae	<i>Zeacalles incultus</i>
Carabidae	<i>Mecodema oconnori</i>	Dryopidae	<i>Parnida</i> sp(p.)
Carabidae	<i>Molopsida polita</i>	Elateridae	<i>Agrypnus variabilis</i>
Carabidae	<i>Neocicindela spilleri</i>	Elateridae	<i>Amphiplatys lawsoni</i>
Carabidae	<i>Parabaris atratus</i>	Elateridae	<i>Oxylasma</i> sp. 1
Carabidae	<i>Pentagonica vittipennis</i>	Elateridae	<i>Sphaenelater collaris</i>
Carabidae	<i>Selenochilus omalleyi</i>	Elateridae	<i>Elateridae</i> sp. 1
Cerambycidae	<i>Microlamia pygmaea</i>	Erotylidae	<i>Cryptodacne nui</i>
Cerambycidae	<i>Nodulosoma angustum</i>	Erotylidae	<i>Cryptodacne</i> sp(p.)
Cerambycidae	<i>Oemona hirta</i>	Hydrophilidae	<i>Adolopus</i> sp(p.)
Cerambycidae	<i>Ptinosoma</i> sp. 1	Hydrophilidae	<i>Cercyon</i> sp(p.)
Cerambycidae	<i>Stenellipsis</i> sp(p.)	Hydrophilidae	<i>Cyloma guttulus</i>
Cerambycidae	<i>Tenebrosoma</i> sp(p.)	Hydrophilidae	<i>Cyloma lawsonus</i>
Cerambycidae	<i>Xylotoles</i> sp(p.)	Hydrophilidae	<i>Cyloma</i> sp. 1
Chrysomelidae	<i>Adoxia</i> sp(p.)	Hydrophilidae	<i>Cyloma stewarti</i>
Chrysomelidae	<i>Caccommolpus</i> sp. 1	Hydrophilidae	<i>Saphydrus</i> sp. 1
Chrysomelidae	<i>Eucolaspis</i> sp(p.)	Hydrophilidae	<i>Tormissus linsi</i>
Chrysomelidae	<i>Peniticus</i> sp. 1	Latridiidae	<i>Corticariinae</i> sp. 1
Cloridae	<i>Phymatophaea</i> sp. 1	Latridiidae	<i>Lithostygnus</i> sp(p.)
Coccinellidae	<i>Halmus chalybeus</i>	Leiodidae	<i>Camiarus</i> sp(p.)
Coccinellidae	<i>Rhyzobius fagus</i>	Leiodidae	<i>Choleviniae</i> sp. 1
Coccinellidae	<i>Rhyzobius rarus</i>	Leiodidae	<i>Inocatops</i> sp(p.)
Corylophidae	<i>Holopsis</i> sp(p.)	Leiodidae	<i>Isocolon</i> sp(p.)
Cryptophagidae	<i>Micrambina</i> sp(p.)	Leiodidae	<i>Zeadolopus</i> sp(p.)
Cryptophagidae	<i>Picrotus thoracicus</i>	Lucanidae	<i>Dendrobax earlii</i>
Curculionidae	<i>Agacalles</i> sp(p.)	Lucanidae	<i>Paralissotes planus</i>
Curculionidae	<i>Allanalcis</i> sp(p.)	Melandryidae	<i>Hylobia</i> spp.
Curculionidae	<i>Asynonychus cervinus</i>	Nitidulidae	<i>Epuraea</i> sp(p.)
Curculionidae	<i>Bantides</i> sp(p.)	Ptiliidae	<i>Notoptenidium</i> sp(p.)
Curculionidae	<i>Brachyolus punctatus</i>	Scarabaeidae	<i>Acrossidius tasmaniae</i>
Curculionidae	<i>Catoptes binodis</i>	Scarabaeidae	<i>Costelytra zealandica</i>
Curculionidae	<i>Clypeolus</i> sp(p.)	Scarabaeidae	<i>Heteronychus arator</i>
Curculionidae	<i>Cossoniane</i> sp. 1	Scarabaeidae	<i>Odontria</i> sp(p.)
Curculionidae	<i>Crisius binotatus</i>	Scarabaeidae	<i>Saphobius edwardsi</i>
Curculionidae	<i>Crisius</i> sp(p.)	Scarabaeidae	<i>Saphobius fulvipes</i>
Curculionidae	<i>Crisius variegatus</i>	Scarabaeidae	<i>Saphobius inflatipes</i>
Curculionidae	<i>Crooktallus certus</i>	Scarabaeidae	<i>Saphobius squamulosus</i>
Curculionidae	<i>Dermothrius</i> sp(p.)	Scarabaeidae	<i>Stethaspis</i> sp. 1
Curculionidae	<i>Etheophanus</i> sp(p.)	Scirtidae	<i>Cyphanodes vestitus</i>
Curculionidae	<i>Exomesites optimus</i>	Scirtidae	<i>Cyprobius</i> sp(p.)
Curculionidae	<i>Geochus</i> sp(p.)	Scirtidae	<i>Scirtidae</i> sp. 1
Curculionidae	<i>Gerynassa</i> sp. 1	Silvanidae	<i>Brontopriscus pleuralis</i>
Curculionidae	<i>Gromilus</i> sp(p.)	Staphylinidae	<i>Aleocharinae</i> sp. 1
Curculionidae	<i>Hiiracalles</i> sp. 1	Staphylinidae	<i>Anabaxis foveolata</i>
Curculionidae	<i>Hygrochus</i> sp. 1	Staphylinidae	<i>Baeocera</i> sp(p.)
Curculionidae	<i>Indecentia nubila</i>	Staphylinidae	<i>Brachynopus</i> sp(p.)
Curculionidae	<i>Lithocia</i> sp. 1	Staphylinidae	<i>Eupines</i> sp(p.)
Curculionidae	<i>Nestrius</i> sp(p.)	Staphylinidae	<i>Euplectitae</i> sp. 1
Curculionidae	<i>Oropterus coniger</i>	Staphylinidae	<i>Hamotulus</i> sp. 1
Curculionidae	<i>Paelocharis</i> sp(p.)	Staphylinidae	<i>Hyperomma</i> sp(p.)
Curculionidae	<i>Paromalina vestita</i>	Staphylinidae	<i>Maorotheus</i> sp(p.)
Curculionidae	<i>Phronira</i> sp(p.)	Staphylinidae	<i>Microsilpha</i> sp(p.)
Curculionidae	<i>Phrynixus</i> sp(p.)	Staphylinidae	<i>Omaliinae</i> sp. 1

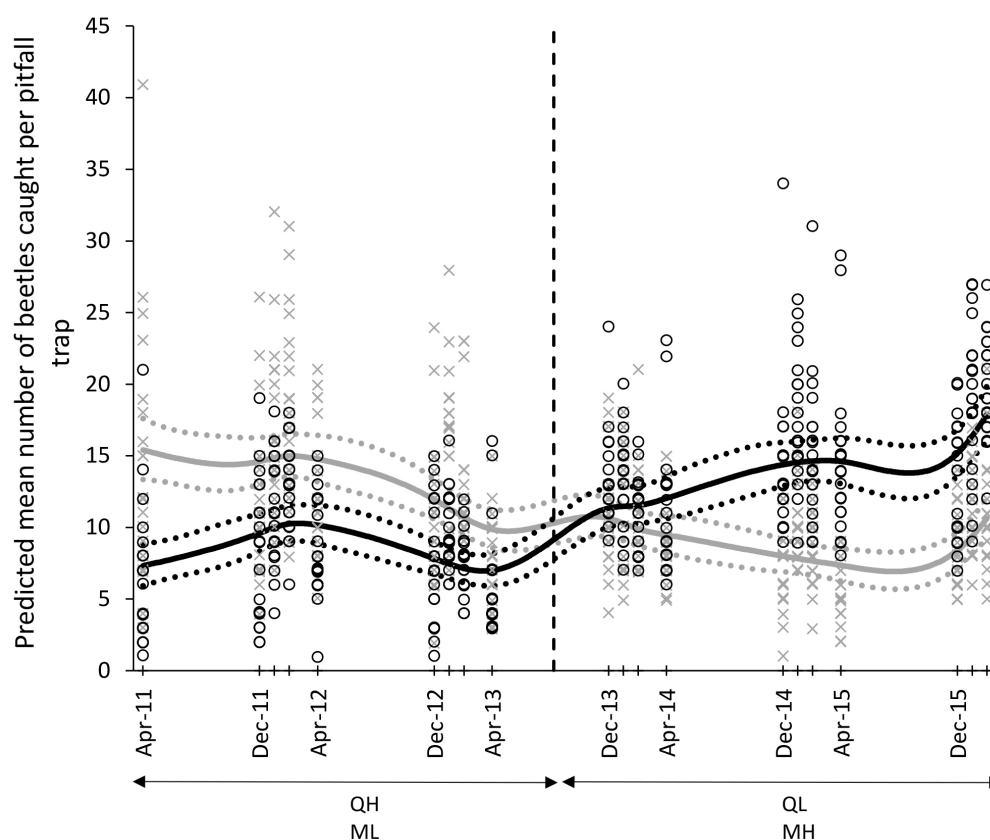
Supplementary materials

Appendix S1. Beetle species (RTUs) caught in pitfall traps in Q and M blocks within Sanctuary Mountain Maungatautari.

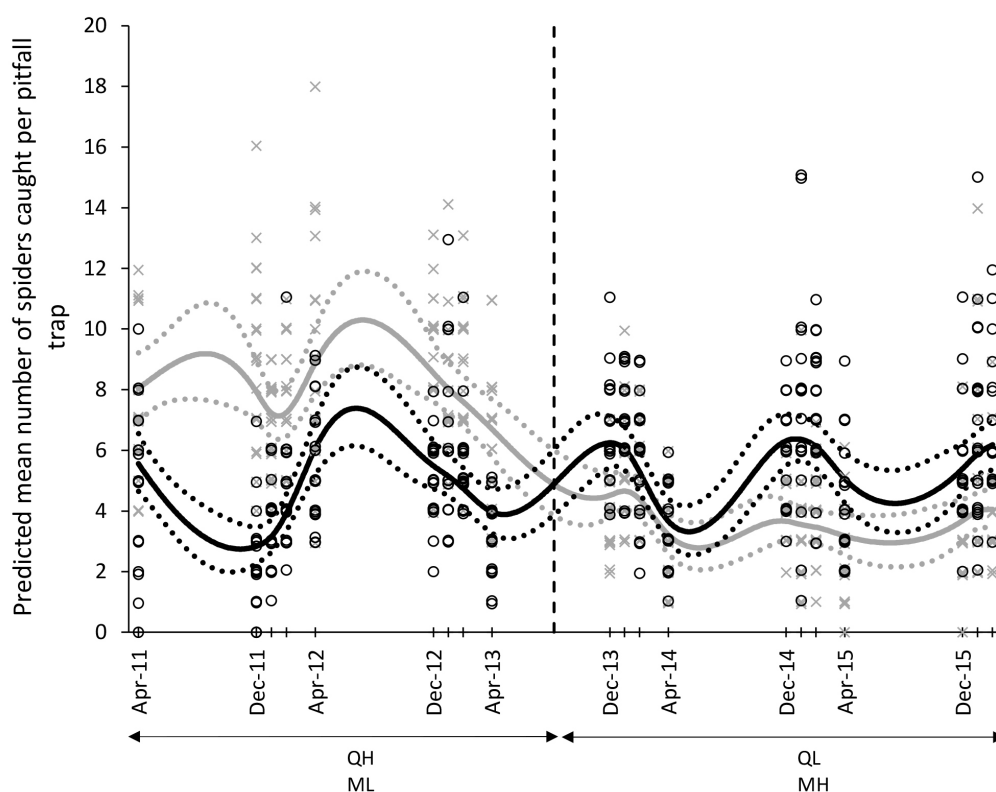
Family	Species
Staphylinidae	<i>Paratorchus</i> sp(p.)
Staphylinidae	<i>Quedius longiceps</i>
Staphylinidae	<i>Quedius</i> sp. 1 (big)
Staphylinidae	<i>Sagola</i> sp(p.)
Staphylinidae	<i>Scydmaeninae</i> sp. 1
Staphylinidae	<i>Sepedophilus</i> sp(p.)
Staphylinidae	<i>Sytus</i> sp(p.)
Staphylinidae	<i>Tramiathaea cornigera</i>
Tenebrionidae	<i>Artystona</i> sp. 1
Tenebrionidae	<i>Kaszabadelium aucklandicum</i>
Tenebrionidae	<i>Menimus</i> sp(p.)
Tenebrionidae	<i>Tanychilus metallicus</i>
Tenebrionidae	<i>Xylochus</i> sp(p.)
Ulodidae	<i>Brouniphylax</i> sp(p.)
Zopheridae	<i>Ablabus</i> sp(p.)
Zopheridae	<i>Glenentela</i> sp. 1
Zopheridae	<i>Pristoderus bakewelli</i>
Zopheridae	<i>Pristoderus tuberculatus</i>
Zopheridae	<i>Pycnomerus</i> sp(p.)
Zopheridae	<i>Rytinotus squamulosus</i>
Zopheridae	<i>Syncalus</i> sp(p.)
Zopheridae	<i>Tarphiomimus indentatus</i>



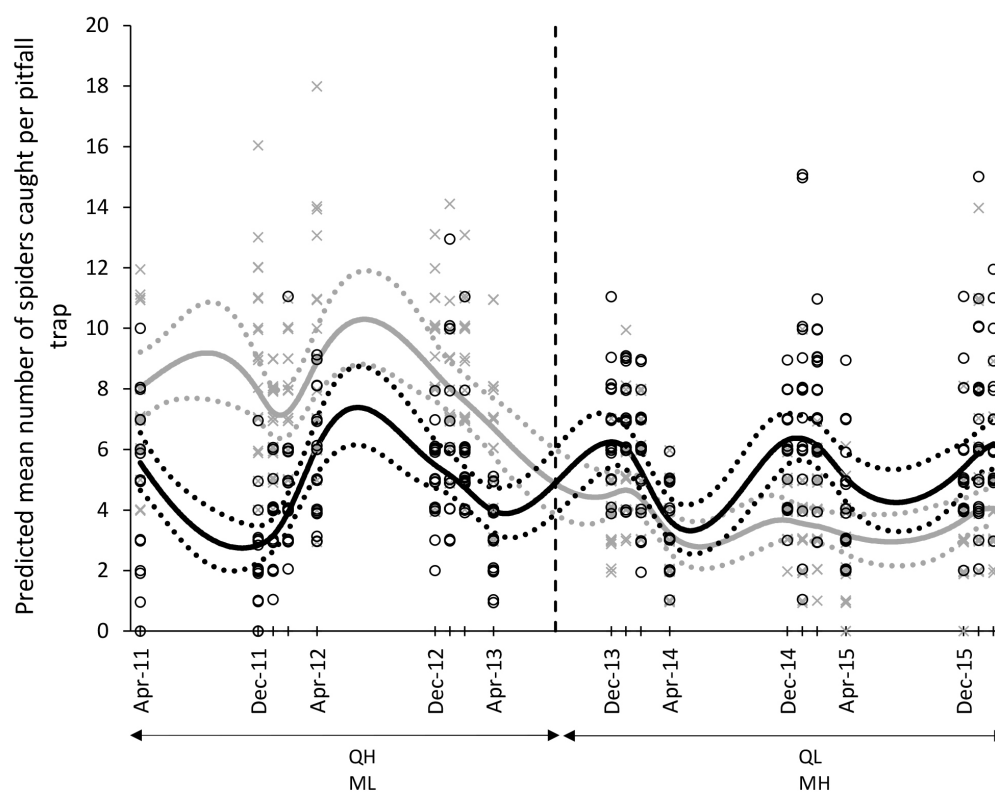
Appendix S2. Comparison of the pitfall-trapped invertebrates between Q and M blocks: Predicted mean total number of invertebrates caught in pitfall traps at study block M (grey solid line) and Q (black solid line). The dashed lines represent 83% confidence intervals around the predicted values. Non-overlapping 83% confidence intervals indicate differences between the study blocks at the 5% significance level. Observed data for block M is plotted with grey crosses and for block Q with black circles. The vertical dashed line denotes the “treatment switch” where mice were eradicated from Q block whilst in M block mouse control ceased. The observed data has been jittered, by adding a small amount of random noise, in order to prevent overplotting.



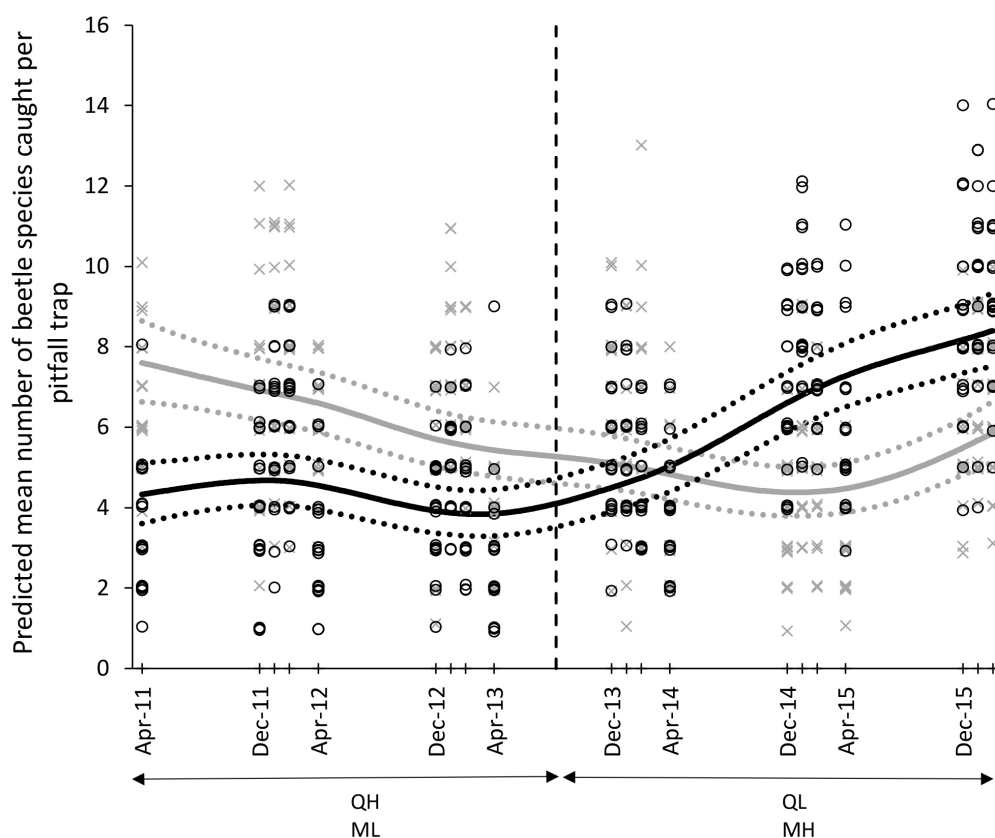
Appendix S3. Comparison of the pitfall-trapped invertebrates between Q and M blocks: Predicted mean number of beetles caught in pitfall traps at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S2.



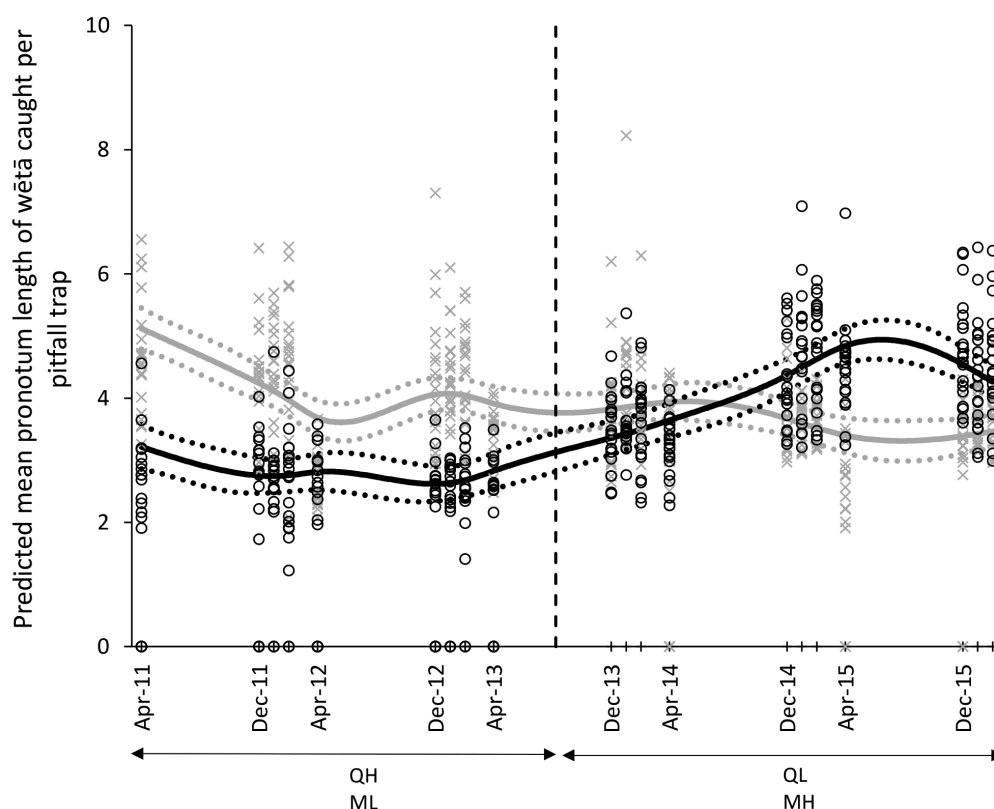
Appendix S4. Comparison of the pitfall-trapped invertebrates between Q and M blocks: Predicted mean number of wētā caught in pitfall traps at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S2.



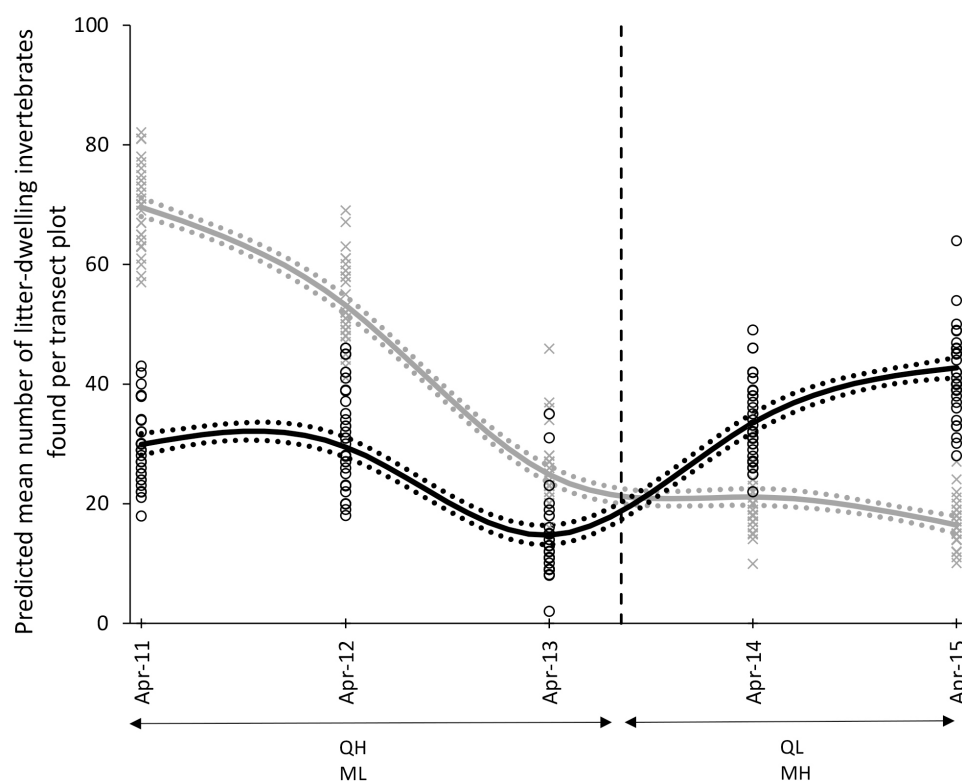
Appendix S5. Comparison of the pitfall-trapped invertebrates between Q and M blocks: Predicted mean number of spiders caught in pitfall traps at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S2.



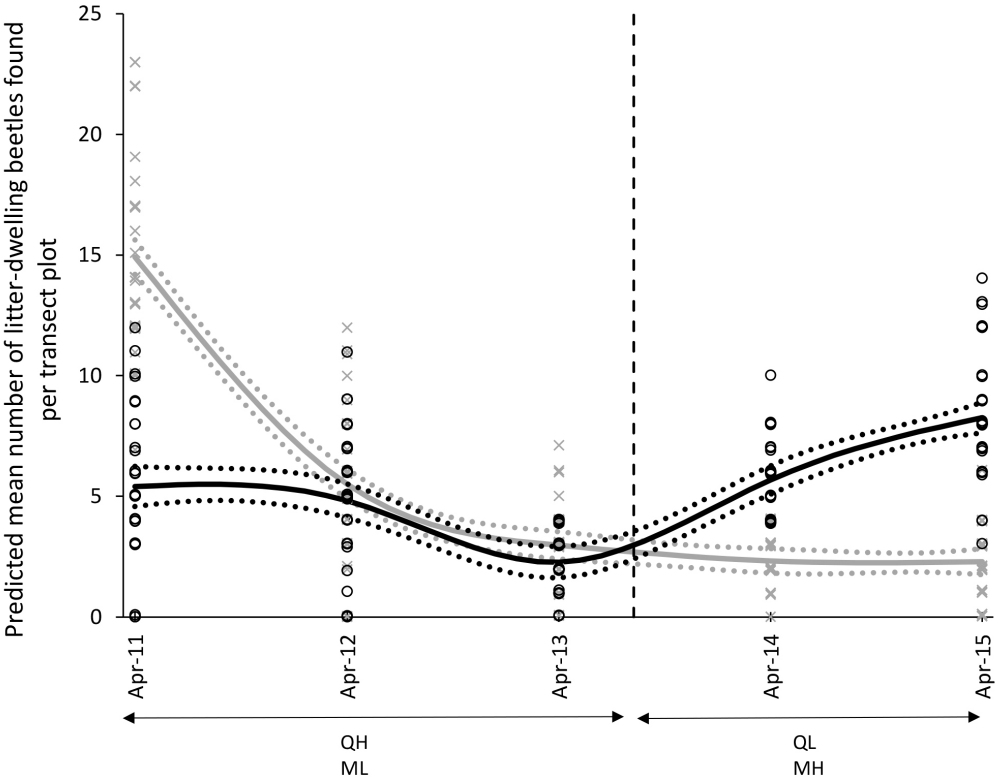
Appendix S6. Comparison of the pitfall-trapped invertebrates between Q and M blocks: Predicted mean number of beetle species caught in pitfall traps at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S2.



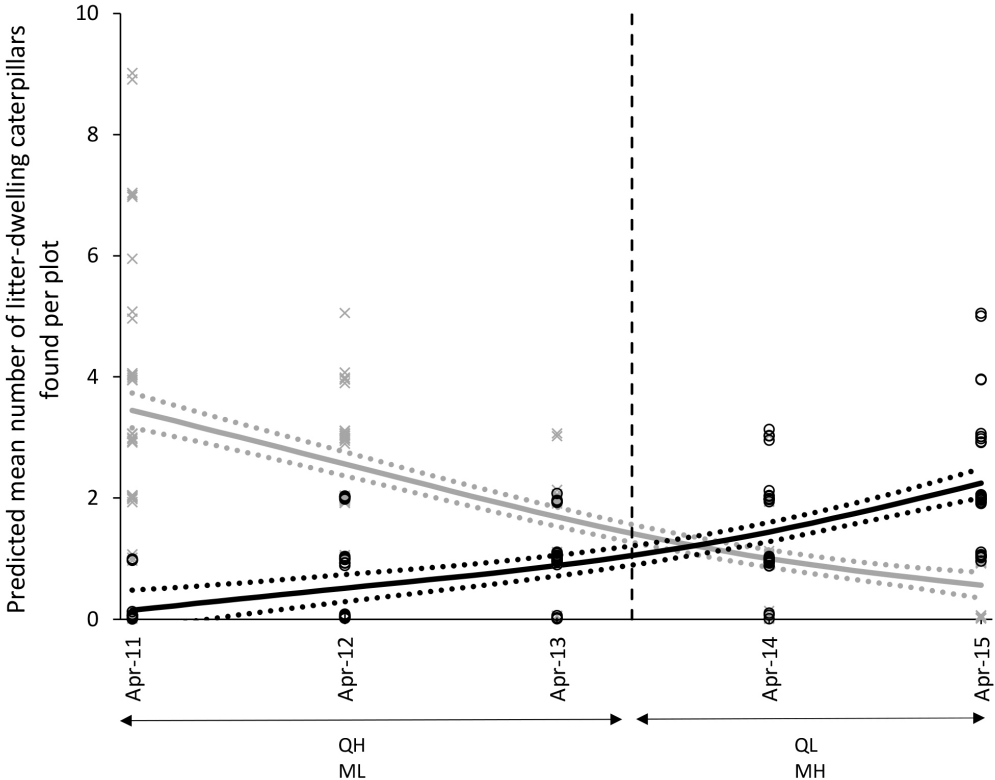
Appendix S7. Comparison of the pitfall-trapped invertebrates between Q and M blocks: Predicted mean pronotum length of wētā caught in pitfall traps at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S2.



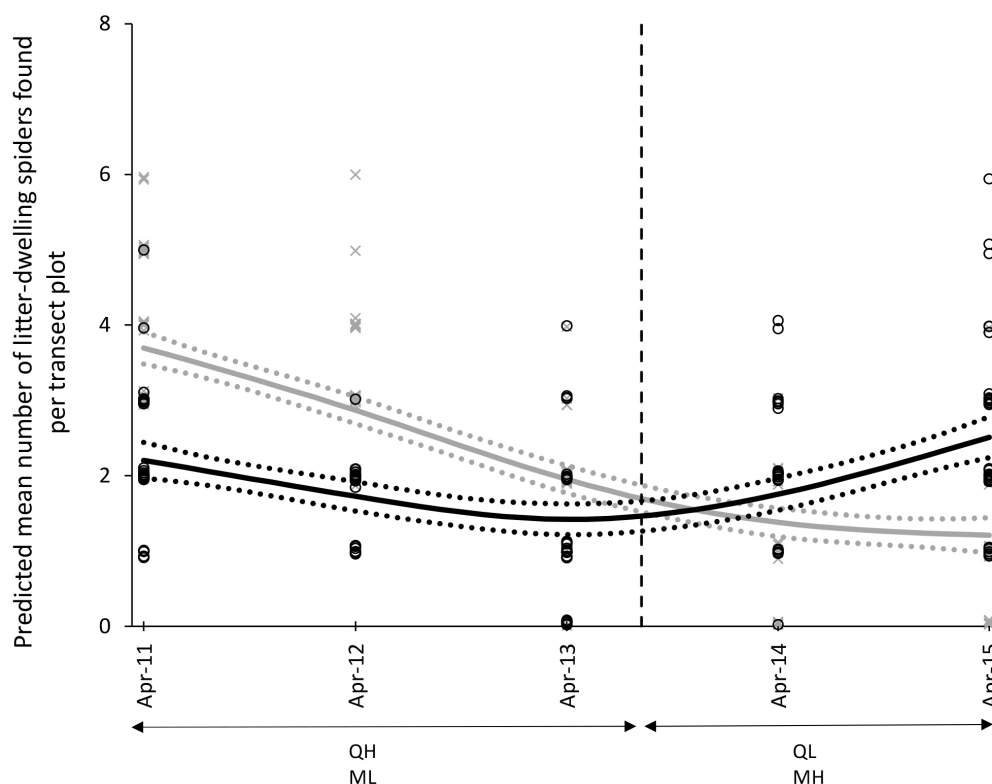
Appendix S8. Comparison of the leaf litter dwelling invertebrates between Q and M blocks: Predicted mean total number of litter-dwelling invertebrates found in transect plots at study block M (grey solid line) and Q (black solid line). The dashed lines represent 83% confidence intervals around the predicted values. Non-overlapping 83% confidence intervals indicate differences between the study blocks at the 5% significance level. Observed data for block M is plotted with grey crosses and for block Q with black circles. The vertical dashed line denotes the “treatment switch” where mice were eradicated from Q block whilst in M block mouse control ceased. The observed data has been jittered, by adding a small amount of random noise, in order to prevent overplotting.



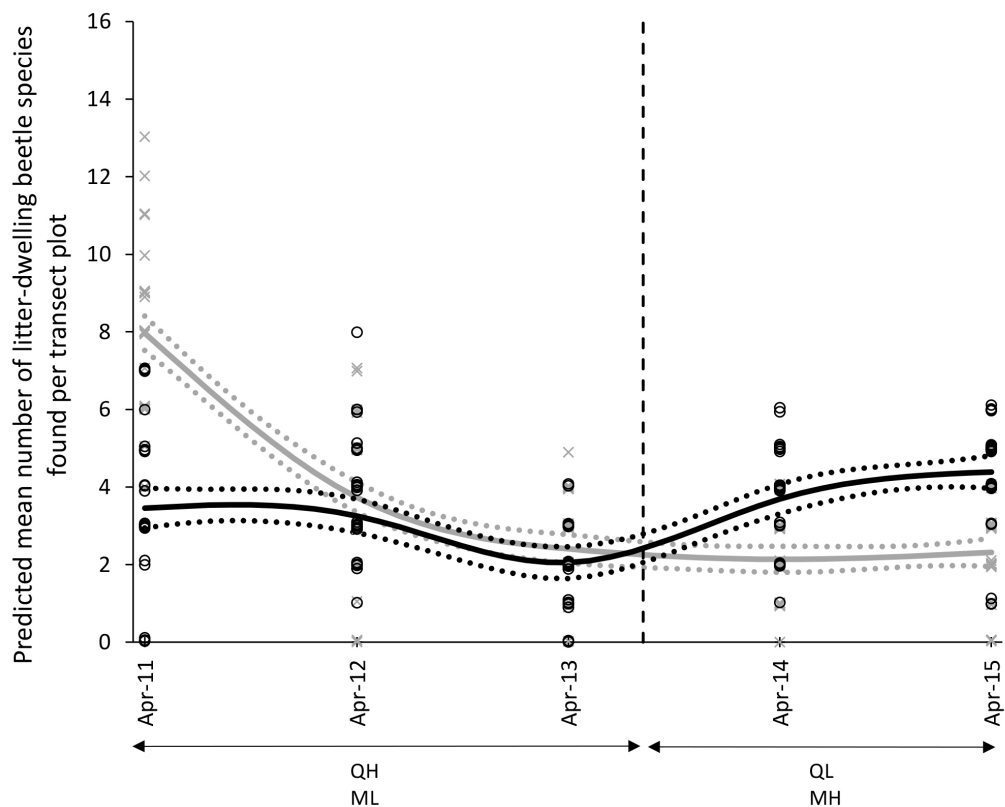
Appendix S9. Comparison of the leaf litter dwelling invertebrates between Q and M blocks: Predicted mean number of litter-dwelling beetles found in transect plots at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S8.



Appendix S10. Comparison of the leaf litter dwelling invertebrates between Q and M blocks: Predicted mean number of litter-dwelling caterpillars found in transect plots at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S8.



Appendix S11. Comparison of the leaf litter dwelling invertebrates between Q and M blocks: Predicted mean number of litter-dwelling spiders found in transect plots at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S8.



Appendix S12. Comparison of the leaf litter dwelling invertebrates between Q and M blocks: Predicted mean number of litter-dwelling beetle species found in transect plots at study block M and Q. Symbols, dashed 83% confidence intervals lines, vertical dashed line and observed data jittering are as in Fig. S8.