Supplementary material in "Secondary invasions hinder recovery of native communities after removal of nonnative pines along a precipitation gradient in Patagonia" Agostina Torres, Pablo A. E. Alarcón, Mariano A. Rodríguez-Cabal and Martín A. Nuñez. Correspondence: nunezm@gmail.com.

Table S1. Sites location (coordinates) with mean annual precipitation (mm) and time elapsed since clearcutting (yr) at each site.

Sites names	Latitude (S)	Longitude (W)	Mean annual precipitation (mm)	Clearcut age (yr)
AA 1	39°18'49.48	70°59'49.03"	648	3
AA 2	39°18'33.43"	70°58'36.52"	619	2
AMU 1	41°13'26.70"	71°24'29.70"	973	2
AMU 2	41°13'21.87"	71°24'32.31"	995	6
AMU 3	41°13'27.35"	71°24'33.58"	983	4
CF	41°34'56.16"	71°31'9.71"	1265	3
CON 1	41° 8'37.00"	71°15'12.90"	863	4.5
CON 2	41° 8'54.30"	71°14'54.20"	876	3
MC	41°12'43.70	71°13'35.00"	805	8
PM	40°58'39.43"	71°31'29.96"	1181	5
QQ2	40° 9'5.48"	71°35'30.22"	1274	5
QQ3	40° 9'33.05"	71°33'11.22"	1262	3.5
SJ 1	40°29'43.70"	71°12'21.70"	846	4
SJ 2	40°29'33.28"	71°11'13.40"	824	7.5
SJ 3	40°29'44.00"	71°10'57.90"	827	6
VM	41°21'8.00"	71°31'6.81"	1216	ns
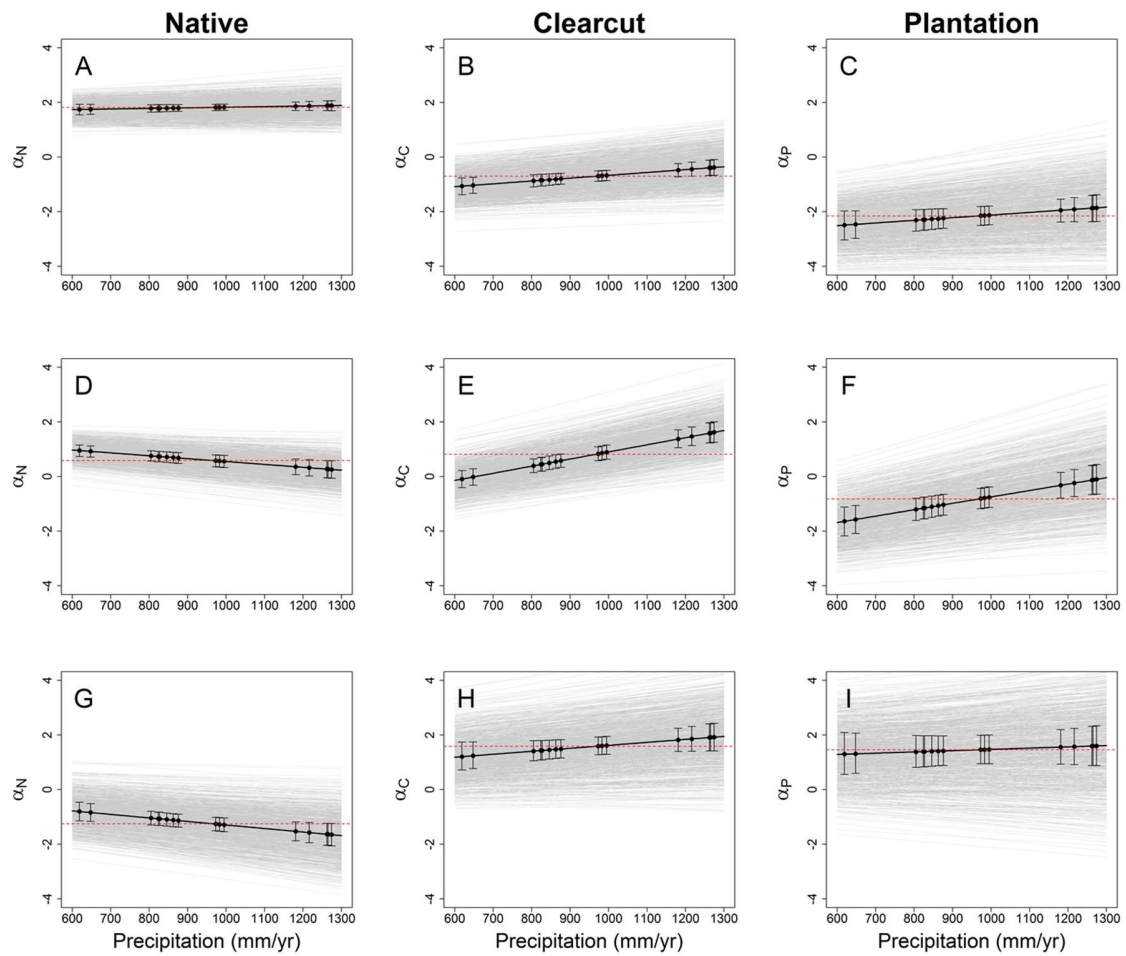
Figure S1. Effect size of each land use type (native (α_N), clearcut (α_C), and plantation (α_P)) at each precipitation level for native richness (A-C), nonnative richness (D-F) and proportion of nonnative richness (G-I). Black points are the estimated parameters for each site with credible intervals of 95% (95 IC). Black lines represent the hierarchical linear model of the estimated parameters against precipitation. Red line is the average effect of the land use type along the precipitation gradient. Effect sizes of clearcut and plantation communities are relative to the native community. Effect sizes were considered ecologically relevant when 95 IC did not overlap with zero.
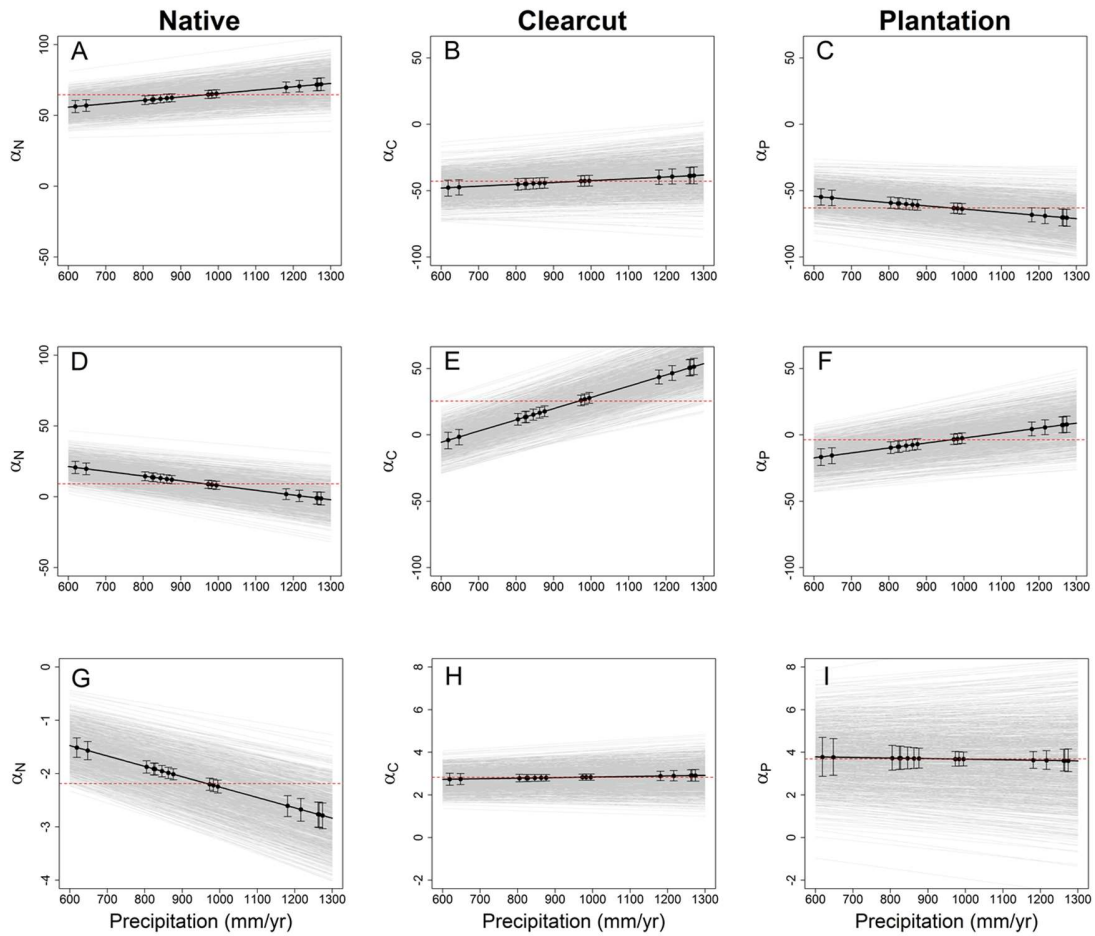
Figure S2. Effect size of each land use type (native (α_N), clearcut (α_C), and plantation (α_P)) at each precipitation level for native cover (A-C), nonnative cover (D-F) and proportion of nonnative cover (G-I). Black points are the estimated parameters for each site with credible intervals of 95% (95 IC). The black line represents the hierarchical linear model of the estimated parameters against precipitation. The red line is the average effect of the land use type along the precipitation gradient. Effect sizes of clearcut and plantation communities are relative to the native community. Effect sizes were considered ecologically relevant when 95 IC did not overlap with zero.
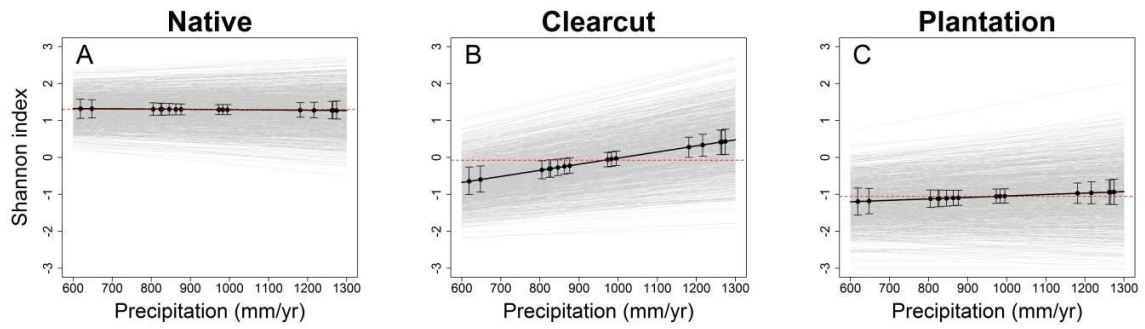
Figure S3. Effect size of each land use type (native, clearcut, and plantation) at each precipitation level for Shannon diversity index. Black points are the estimated parameters for each site with credible intervals of 95% (95 CI). The black line represents the hierarchical linear model of the estimated parameters against precipitation. The red line is the average effect of the land use type along the precipitation gradient. Effect sizes were considered ecologically relevant when 95 CI did not overlap with zero. Effect sizes of clearcut and plantation communities are relative to the native community.

Table S2. Species cover (%) in 4 m² at each land use type at each site.

Sites	Land-Use Type	Species	Cover (%)
AA 1	Clearcut	*Acaena splendens*	1.5
AA 1	Native	*Adesmia boronioides*	1.5
AA 1	Native	*Berberis microphylla*	9.5
AA 1	Native	*Crataegus monogyna*	15
AA 1	Native	*Nothofagus antarctica*	67.5
AA 1	Native	*Berberis microphylla*	15
AA 1	Native	*Nothofagus antarctica*	65
AA 1	Native	*Senecio bracteolatus*	1.5
AA 1	Native	*Berberis microphylla*	3.75
AA 1	Native	*Crataegus monogyna*	2.75
AA 1	Native	*Nothofagus antarctica*	28.75
AA 1	Native	*Senecio bracteolatus*	1
AA 1	Plantation	*Anemone multifida*	1
AA 1	Plantation	*Berberis trigona*	6
AA 1	Plantation	*Rhodophiala mendocina*	0.5
AA 1	Plantation	*Acaena splendens*	2
AA 2	Clearcut	*Pinus ponderosa*	1.25
AA 2	Clearcut	*Pinus ponderosa*	8.25
AA 2	Clearcut	*Taraxacum officinale*	1.25
AA 2	Clearcut	*Epilobium brachycarpum*	0.5
AA 2	Clearcut	*Pinus ponderosa*	28.75
AA 2	Clearcut	*Pseudognaphalium viravira*	0.75
AA 2	Clearcut	*Senecio bracteolatus*	5
AA 2	Clearcut	*Taraxacum officinale*	0.75
AA 2	Native	*Acaena splendens*	2
AA 2	Native	*Adesmia boronioides*	6.25
AA 2	Native	*Amelichloa brevipes*	15
AA 2	Native	*Azorella prolifera*	0.75
AA 2	Native	*Berberis microphylla*	71.25
AA 2	Native	*Bromus setifolius*	1.5
AA 2	Native	*Cerastium arvense*	0.75
AA 2	Native	*Hordeum comosum*	0.75
AA 2	Native	*Nassauvia aculeata*	1
AA 2	Native	*Senecio bracteolatus*	3.5
AA 2	Native	*Acaena splendens*	3
AA 2	Native	*Amelichloa brevipes*	14.5
AA 2	Native	*Azorella prolifera*	32.5
AA 2	Native	*Berberis microphylla*	0.75
AA 2	Native	*Bromus setifolius*	1.5
AA 1	Native	*Cerastium arvense*	0.75
AA 2	Native	*Festuca pallescens*	1.25
AA 2	Native	*Pappostipa speciosa*	0.75
AA 2	Native	*Acaena splendens*	11.5
AA 2	Native	*Adesmia boronioides*	18.75

AA 2	Native	*Amelichloa brevipes*	8.75
AA 2	Native	*Azorella prolifera*	4.75
AA 2	Native	*Baccharis rhomboidalis*	3.75
AA 2	Native	*Berberis microphylla*	12
AA 2	Native	*Bromus setifolius*	0.75
AA 2	Native	*Nassauvia juniperina*	0.75
AA 2	Native	*Pappostipa speciosa*	12.5
AA 2	Native	*Rhodophiala mendocina*	0.75
AA 2	Native	*Senecio bracteolatus*	5.25
AA 2	Plantation	*Bromus setifolius*	1
AA 2	Plantation	*Pinus ponderosa*	1
AA 2	Plantation	*Pinus ponderosa*	2
AM 1	Clearcut	*Galium hypocarpium*	0.5
AM 1	Clearcut	*Heliotropium paronychioides*	1
AM 1	Clearcut	*Lactuca serriola*	8
AM 1	Clearcut	*Phacelia secunda*	1.5
AM 1	Clearcut	*Rumex acetosella*	0.5
AM 1	Clearcut	*Verbascum thapsus*	0.75
AM 1	Clearcut	*Acaena ovalifolia*	0.75
AM 1	Clearcut	*Arenaria serpyllifolia*	1
AM 1	Clearcut	*Cirsium vulgare*	14.5
AM 1	Clearcut	*Crepis aff. setosa*	1.5
AM 1	Clearcut	*Geranium magellanicum*	0.75
AM 1	Clearcut	*Holcus lanatus*	1.25
AM 1	Clearcut	*Lactuca serriola*	4.75
AM 1	Clearcut	*Medicago lupulina*	2.75
AM 1	Clearcut	*Prunus sp.*	0.075
AM 1	Clearcut	*Pseudotsuga menziesii*	0.525
AM 1	Clearcut	*Rumex acetosella*	1.25
AM 1	Clearcut	*Verbascum thapsus*	0.75
AM 1	Clearcut	*Carduus thoermeri*	1.25
AM 1	Clearcut	*Cirsium vulgare*	3
AM 1	Clearcut	*Crepis aff. setosa*	0.25
AM 1	Clearcut	*Holcus lanatus*	1.25
AM 1	Clearcut	*Lactuca serriola*	10
AM 1	Clearcut	*Prunus sp.*	0.25
AM 1	Clearcut	*Pseudotsuga menziesii*	0.3
AM 1	Clearcut	*Rumex acetosella*	2.25
AM 1	Clearcut	*Verbascum thapsus*	1.5
AM 1	Native	*Acaena splendens*	10
AM 1	Native	*Agrostis gigantea*	0.25
AM 1	Native	*Berberis microphylla*	9.75
AM 1	Native	*Colletia hystrix*	11.25
AM 1	Native	*Elymus magellanicus*	1.5
AM 1	Native	*Embothrium coccineum*	8.25
AM 1	Native	*Fabiana imbricata*	5
AM 1	Native	*Loasa bergii*	0.025
AM 1	Native	*Maytenus boaria*	21.5

AM 1	Native	*Maytenus disticha*	1
AM 1	Native	*Mutisia spinosa*	1
AM 1	Native	*Rumex acetosella*	12.25
AM 1	Native	*Schinus patagonicus*	37.5
AM 1	Native	*Alstroemeria aurea*	23.75
AM 1	Native	*Berberis microphylla*	8.75
AM 1	Native	*Colletia hystrix*	16.25
AM 1	Native	*Cytisus scoparius*	1.25
AM 1	Native	*Embothrium coccineum*	0.25
AM 1	Native	*Maytenus boaria*	0.5
AM 1	Native	*Mutisia spinosa*	3.75
AM 1	Native	*Rumex acetosella*	0.75
AM 1	Native	*Schinus patagonicus*	35
AM 1	Native	*Agrostis gigantea*	3
AM 1	Native	*Alstroemeria aurea*	13
AM 1	Native	*Arenaria serpyllifolia*	1
AM 1	Native	*Berberis microphylla*	11.5
AM 1	Native	*Colletia hystrix*	2.5
AM 1	Native	*Geranium magellanicum*	2
AM 1	Native	*Loasa bergii*	1
AM 1	Native	*Maytenus boaria*	12.5
AM 1	Native	*Mutisia spinosa*	1.75
AM 1	Native	*Rumex acetosella*	4.25
AM 1	Native	*Schinus patagonicus*	45
AM 1	Native	*Solidago chilensis*	11.75
AM 1	Plantation	*Osmorhiza chilensis*	2.5
AM 1	Plantation	*Pseudotsuga menziesii*	30
AM 1	Plantation	*Ribes magellanicum*	0.25
AM 1	Plantation	*Schinus patagonicus*	1.25
AM 1	Plantation	*Crepis aff. setosa*	2.25
AM 1	Plantation	*Dactylis glomerata*	2
AM 1	Plantation	*Geranium magellanicum*	1.5
AM 1	Plantation	*Lactuca serriola*	0.5
AM 1	Plantation	*Pseudotsuga menziesii*	22.5
AM 1	Plantation	*Taraxacum officinale*	1.25
AM 1	Plantation	*Pseudotsuga menziesii*	71.25
AM 1	Plantation	*Schinus patagonicus*	1.75
AM 2	Clearcut	*Aristotelia chilensis*	27.5
AM 2	Clearcut	*Bromus catharticus*	1
AM 2	Clearcut	*Cirsium vulgare*	2
AM 2	Clearcut	*Crepis aff. capillaris*	0.25
AM 2	Clearcut	*Holcus lanatus*	1.25
AM 2	Clearcut	*Lactuca serriola*	2.25
AM 2	Clearcut	*Mutisia spinosa*	7.5
AM 2	Clearcut	*Prunus sp.*	0.25
AM 2	Clearcut	*Pseudotsuga menziesii*	55
AM 2	Clearcut	*Ribes magellanicum*	1.5
AM 2	Clearcut	*Schinus patagonicus*	2.5

AM 2	Clearcut	*Acaena ovalifolia*	1.25
AM 2	Clearcut	*Aristotelia chilensis*	1.25
AM 2	Clearcut	*Bromus catharticus*	2.5
AM 2	Clearcut	*Carduus thoermeri*	10
AM 2	Clearcut	*Cirsium vulgare*	40.75
AM 2	Clearcut	*Holcus lanatus*	1.75
AM 2	Clearcut	*Lactuca serriola*	10.25
AM 2	Clearcut	*Medicago lupulina*	0.5
AM 2	Clearcut	*Mutisia spinosa*	0.25
AM 2	Clearcut	*Pseudotsuga menziesii*	28
AM 2	Clearcut	*Rumex acetosella*	0.75
AM 2	Clearcut	*Schinus patagonicus*	6.25
AM 2	Clearcut	*Vicia nigricans*	0.025
AM 2	Clearcut	*Aristotelia chilensis*	6.25
AM 2	Clearcut	*Carduus thoermeri*	1.25
AM 2	Clearcut	*Cirsium vulgare*	30.25
AM 2	Clearcut	*Crepis aff. setosa*	0.5
AM 2	Clearcut	*Galium hypocarpium*	0.5
AM 2	Clearcut	*Holcus lanatus*	13.75
AM 2	Clearcut	*Lactuca serriola*	10
AM 2	Clearcut	*Lomatia hirsuta*	3.75
AM 2	Clearcut	*Medicago lupulina*	2.75
AM 2	Clearcut	*Pseudotsuga menziesii*	9.25
AM 2	Clearcut	*Rumex acetosella*	0.25
AM 2	Clearcut	*Verbascum thapsus*	1.25
AM 2	Native	*Arenaria serpyllifolia*	0.25
AM 2	Native	*Berberis microphylla*	14.25
AM 2	Native	*Galium hypocarpium*	0.75
AM 2	Native	*Geranium magellanicum*	0.25
AM 2	Native	*Holcus lanatus*	0.75
AM 2	Native	*Maytenus boaria*	28.75
AM 2	Native	*Mutisia decurrens*	4
AM 2	Native	*Mutisia spinosa*	7.25
AM 2	Native	*Rumex acetosella*	3.25
AM 2	Native	*Schinus patagonicus*	11.5
AM 2	Native	*Solidago chilensis*	3.5
AM 2	Native	*Vicia nigricans*	6.5
AM 2	Native	*Berberis microphylla*	4.75
AM 2	Native	*Diostea juncea*	0.75
AM 2	Native	*Lomatia hirsuta*	25.25
AM 2	Native	*Mutisia spinosa*	3
AM 2	Native	*Ochetophila trinervis*	40
AM 2	Native	*Rumex acetosella*	1
AM 2	Native	*Schinus patagonicus*	18.75
AM 2	Native	*Solidago chilensis*	0.25
AM 2	Native	*Agrostis gigantea*	2.5
AM 2	Native	*Colletia hystrix*	35
AM 2	Native	*Collomia biflora*	0.75

AM 2	Native	*Maytenus boaria*	65
AM 2	Native	*Mutisia spinosa*	0.025
AM 2	Native	*Rhodophiala mendocina*	0.25
AM 2	Native	*Rosa rubiginosa*	7.5
AM 2	Native	*Rumex acetosella*	4.5
AM 2	Native	*Schinus patagonicus*	2.5
AM 2	Plantation	*Pseudotsuga menziesii*	0.25
AM 2	Plantation	*Pseudotsuga menziesii*	5.75
AM 2	Plantation	*Pseudotsuga menziesii*	38.75
AM 3	Clearcut	*Bromus catharticus*	2.5
AM 3	Clearcut	*Cirsium vulgare*	0.5
AM 3	Clearcut	*Holcus lanatus*	61.75
AM 3	Clearcut	*Lactuca serriola*	2
AM 3	Clearcut	*Pseudotsuga menziesii*	9.25
AM 3	Clearcut	*Verbascum thapsus*	4
AM 3	Clearcut	*Acaena ovalifolia*	6.25
AM 3	Clearcut	*Collomia biflora*	0.5
AM 3	Clearcut	*Epilobium brachycarpum*	0.5
AM 3	Clearcut	*Galium hypocarpium*	3.5
AM 3	Clearcut	*Geranium magellanicum*	4.75
AM 3	Clearcut	*Holcus lanatus*	43.75
AM 3	Clearcut	*Lactuca serriola*	0.75
AM 3	Clearcut	*Oxalis corniculata*	0.75
AM 3	Clearcut	*Pseudotsuga menziesii*	45.25
AM 3	Clearcut	*Schinus patagonicus*	1.5
AM 3	Clearcut	*Alstroemeria aurea*	9.25
AM 3	Clearcut	*Aristotelia chilensis*	60
AM 3	Clearcut	*Collomia biflora*	0.25
AM 3	Clearcut	*Galium hypocarpium*	0.75
AM 3	Clearcut	*Geranium magellanicum*	1.5
AM 3	Clearcut	*Holcus lanatus*	6.25
AM 3	Clearcut	*Lactuca serriola*	1.25
AM 3	Clearcut	*Pseudotsuga menziesii*	51.25
AM 3	Clearcut	*Ribes magellanicum*	5
AM 3	Clearcut	*Schinus patagonicus*	1.25
AM 3	Native	*Acaena splendens*	10.5
AM 3	Native	*Apera interrupta*	5
AM 3	Native	*Berberis microphylla*	4.75
AM 3	Native	*Bromus catharticus*	3.75
AM 3	Native	*Embothrium coccineum*	34
AM 3	Native	*Loasa bergii*	0.25
AM 3	Native	*Lomatia hirsuta*	6.25
AM 3	Native	*Maytenus boaria*	1.5
AM 3	Native	*Mutisia spinosa*	8.75
AM 3	Native	*Rumex acetosella*	5
AM 3	Native	*Schinus patagonicus*	29
AM 3	Native	*Apera interrupta*	1.5
AM 3	Native	*Berberis microphylla*	5

AM 3	Native	*Maytenus boaria*	42.5
AM 3	Native	*Mutisia spinosa*	1.5
AM 3	Native	*Nothofagus antarctica*	42.5
AM 3	Native	*Phacelia secunda*	0.25
AM 3	Native	*Rumex acetosella*	6.25
AM 3	Native	*Schinus patagonicus*	10
AM 3	Native	*Agrostis gigantea*	0.025
AM 3	Native	*Berberis microphylla*	19.75
AM 3	Native	*Collomia biflora*	0.5
AM 3	Native	*Geranium magellanicum*	2.5
AM 3	Native	*Maytenus boaria*	13.5
AM 3	Native	*Mutisia spinosa*	14.25
AM 3	Native	*Ochetophila trinervis*	6.25
AM 3	Native	*Phacelia secunda*	2.75
AM 3	Native	*Rhodophiala mendocina*	0.25
AM 3	Native	*Rumex acetosella*	6.25
AM 3	Native	*Schinus patagonicus*	4.75
CF	Clearcut	*Acaena ovalifolia*	1
CF	Clearcut	*Acaena pinnatifida*	2
CF	Clearcut	*Agrostis gigantea*	1
CF	Clearcut	*Alstroemeria aurea*	0.25
CF	Clearcut	*Baccharis melanopotamica*	8.5
CF	Clearcut	*Cirsium vulgare*	0.5
CF	Clearcut	*Crepis aff. setosa*	3.75
CF	Clearcut	*Cytisus scoparius*	1
CF	Clearcut	*Galium hypocarpium*	1.5
CF	Clearcut	*Gamochaeta americana*	2.5
CF	Clearcut	*Holcus lanatus*	13.25
CF	Clearcut	*Oxalis valdiviense*	2.5
CF	Clearcut	*Pinus contorta var. Murrayana*	1.5
CF	Clearcut	*Plantago lanceolata*	1
CF	Clearcut	*Rosa rubiginosa*	0.25
CF	Clearcut	*Rumex acetosella*	1.5
CF	Clearcut	*Taraxacum officinale*	2.75
CF	Clearcut	*Agrostis gigantea*	1
CF	Clearcut	*Alstroemeria aurea*	2.5
CF	Clearcut	*Bromus catharticus*	2.5
CF	Clearcut	*Cirsium vulgare*	1.25
CF	Clearcut	*Crepis aff. setosa*	12.75
CF	Clearcut	*Geranium magellanicum*	0.25
CF	Clearcut	*Holcus lanatus*	10
CF	Clearcut	*Hypochaeris aff. microcephala*	1.25
CF	Clearcut	*Osmorhiza chilensis*	0.75
CF	Clearcut	*Oxalis valdiviense*	1.5
CF	Clearcut	*Prunella vulgaris*	2.5
CF	Clearcut	*Rosa rubiginosa*	15
CF	Clearcut	*Rumex acetosella*	1.25
CF	Clearcut	*Vicia nigricans*	2.5

CF	Clearcut	Alstroemeria aurea	10.25
CF	Clearcut	Baccharis melanopotamica	1.5
CF	Clearcut	Cirsium vulgare	1
CF	Clearcut	Conyza lechleri	2.5
CF	Clearcut	Crepis aff. setosa	2.25
CF	Clearcut	Galium hypocarpium	1.75
CF	Clearcut	Holcus lanatus	9
CF	Clearcut	Hypochaeris aff. microcephala	0.5
CF	Clearcut	Hypochaeris radicata	2
CF	Clearcut	Oxalis valdiviense	1
CF	Clearcut	Pinus contorta var. Murrayana	1.25
CF	Clearcut	Rosa rubiginosa	0.75
CF	Clearcut	Rumex acetosella	7.75
CF	Clearcut	Schinus patagonicus	0.75
CF	Clearcut	Trifolium repens	3.25
CF	Native	Austrocedrus chilensis	3
CF	Native	Azara microphylla	8.75
CF	Native	Berberis darwinii	0.25
CF	Native	Lomatia hirsuta	46.25
CF	Native	Mutisia spinosa	0.5
CF	Native	Nothofagus dombeyi	48.75
CF	Native	Austrocedrus chilensis	17.5
CF	Native	Azara microphylla	2.5
CF	Native	Berberis darwinii	0.25
CF	Native	Lomatia hirsuta	15
CF	Native	Maytenus boaria	0.25
CF	Native	Osmorhiza chilensis	0.5
CF	Native	Pseudotsuga menziesii	0.75
CF	Native	Schinus patagonicus	2.75
CF	Native	Alstroemeria aurea	1.25
CF	Native	Austrocedrus chilensis	3.75
CF	Native	Azara microphylla	10.5
CF	Native	Berberis darwinii	4.75
CF	Native	Bromus coloratus	1.25
CF	Native	Maytenus boaria	0.75
CF	Native	Nothofagus dombeyi	0.125
CF	Plantation	Alstroemeria aurea	1
CF	Plantation	Holcus lanatus	1.25
CF	Plantation	Osmorhiza chilensis	0.5
CF	Plantation	Pinus contorta var. Murrayana	13.25
CF	Plantation	Rosa rubiginosa	0.5
CF	Plantation	Schinus patagonicus	0.25
CF	Plantation	Austrocedrus chilensis	1
CF	Plantation	Bromus coloratus	2.5
CF	Plantation	Galium hypocarpium	0.25
CF	Plantation	Gaultheria mucronata	10.25
CF	Plantation	Pinus contorta var. Murrayana	0.5
CF	Plantation	Pseudotsuga menziesii	0.75

CF	Plantation	*Rhodophiala mendocina*	1
CF	Plantation	*Rosa rubiginosa*	1
CF	Plantation	*Alstroemeria aurea*	0.25
CF	Plantation	*Berberis darwinii*	4.5
CF	Plantation	*Bromus coloratus*	1.75
CF	Plantation	*Gaultheria mucronata*	6.25
CF	Plantation	*Lomatia hirsuta*	3.75
CF	Plantation	*Osmorhiza chilensis*	0.5
CF	Plantation	*Pinus contorta var. Murrayana*	0.25
CF	Plantation	*Pseudotsuga menziesii*	0.75
CF	Plantation	*Rosa rubiginosa*	12.5
CON 1	Clearcut	*Epilobium brachycarpum*	31.75
CON 1	Clearcut	*Geranium magellanicum*	3
CON 1	Clearcut	*Lactuca serriola*	0.25
CON 1	Clearcut	*Pinus ponderosa*	10.5
CON 1	Clearcut	*Rumex acetosella*	4.5
CON 1	Clearcut	*Agrostis gigantea*	1.25
CON 1	Clearcut	*Apera interrupta*	1.25
CON 1	Clearcut	*Cirsium vulgare*	9.25
CON 1	Clearcut	*Epilobium brachycarpum*	32.75
CON 1	Clearcut	*Hypochaeris radicata*	1.25
CON 1	Clearcut	*Lactuca serriola*	2.5
CON 1	Clearcut	*Loasa bergii*	1.75
CON 1	Clearcut	*Rumex acetosella*	14.5
CON 1	Clearcut	*Cirsium vulgare*	11.5
CON 1	Clearcut	*Epilobium brachycarpum*	55
CON 1	Clearcut	*Loasa bergii*	0.25
CON 1	Clearcut	*Rosa rubiginosa*	1.5
CON 1	Clearcut	*Rumex acetosella*	4.25
CON 1	Native	*Acaena splendens*	0.75
CON 1	Native	*Berberis darwinii*	1
CON 1	Native	*Berberis microphylla*	1.5
CON 1	Native	*Cirsium vulgare*	0.25
CON 1	Native	*Ochetophila trinervis*	75
CON 1	Native	*Poa compressa*	16.5
CON 1	Native	*Schinus patagonicus*	3.25
CON 1	Native	*Verbascum thapsus*	2.5
CON 1	Native	*Berberis darwinii*	4
CON 1	Native	*Berberis microphylla*	0.75
CON 1	Native	*Cirsium vulgare*	5.5
CON 1	Native	*Colletia hystrix*	1.5
CON 1	Native	*Epilobium brachycarpum*	5.25
CON 1	Native	*Poa compressa*	7
CON 1	Native	*Acaena splendens*	1.25
CON 1	Native	*Anemone multifida*	1.25
CON 1	Native	*Berberis darwinii*	0.5
CON 1	Native	*Berberis microphylla*	8
CON 1	Native	*Elymus magellanicus*	1.5

CON 1	Native	*Ochetophila trinervis*	43.75
CON 1	Native	*Poa compressa*	4
CON 1	Native	*Rumex acetosella*	0.25
CON 1	Native	*Verbascum thapsus*	16.5
CON 1	Plantation	*Berberis darwinii*	1
CON 1	Plantation	*Pinus sp.*	1
CON 1	Plantation	*Pinus sp.*	5
CON 1	Plantation	*Pinus sp.*	1
CON 1	Plantation	*Schinus patagonicus*	1
CON 2	Clearcut	*Cirsium vulgare*	20.25
CON 2	Clearcut	*Hordeum comosum*	16.25
CON 2	Clearcut	*Lactuca serriola*	2.25
CON 2	Clearcut	*Pinus ponderosa*	8.75
CON 2	Clearcut	*Rumex acetosella*	1
CON 2	Clearcut	*Senecio argyreus*	0.75
CON 2	Clearcut	*Cirsium vulgare*	10
CON 2	Clearcut	*Elymus magellanicus*	1.75
CON 2	Clearcut	*Epilobium brachycarpum*	6.25
CON 2	Clearcut	*Hordeum comosum*	12
CON 2	Clearcut	*Lactuca serriola*	5.5
CON 2	Clearcut	*Loasa bergii*	1
CON 2	Clearcut	*Pinus ponderosa*	7
CON 2	Clearcut	*Rosa rubiginosa*	2.5
CON 2	Clearcut	*Rumex acetosella*	0.5
CON 2	Clearcut	*Schinus patagonicus*	27.75
CON 2	Clearcut	*Trisetum spicatum*	0.025
CON 2	Clearcut	*Acaena splendens*	11.25
CON 2	Clearcut	*Bromus setifolius*	3.5
CON 2	Clearcut	*Cirsium vulgare*	0.25
CON 2	Clearcut	*Ephedra chilensis*	3
CON 2	Clearcut	*Geranium magellanicum*	3.025
CON 2	Clearcut	*Hordeum comosum*	2.75
CON 2	Clearcut	*Lactuca serriola*	1.25
CON 2	Clearcut	*Loasa bergii*	0.25
CON 2	Clearcut	*Pinus sp.*	0.75
CON 2	Clearcut	*Rhodophiala mendocina*	0.775
CON 2	Clearcut	*Rumex acetosella*	1.75
CON 2	Clearcut	*Tragopogon dubius*	4.5
CON 2	Clearcut	*Trisetum spicatum*	1.25
CON 2	Native	*Anemone multifida*	0.25
CON 2	Native	*Berberis microphylla*	21.25
CON 2	Native	*Colletia hystrix*	46.25
CON 2	Native	*Collomia biflora*	0.25
CON 2	Native	*Euphorbia hieronymi*	0.075
CON 2	Native	*Holcus lanatus*	0.55
CON 2	Native	*Hordeum comosum*	0.25
CON 2	Native	*Loasa bergii*	0.025
CON 2	Native	*Maytenus boaria*	0.75

CON 2	Native	*Rumex acetosella*	5.25
CON 2	Native	*Schinus patagonicus*	0.5
CON 2	Native	*Viola reichei*	2.5
CON 2	Native	*Acaena splendens*	1.5
CON 2	Native	*Berberis microphylla*	15
CON 2	Native	*Colletia hystrix*	35
CON 2	Native	*Euphorbia hieronymi*	0.275
CON 2	Native	*Festuca rubra*	1.25
CON 2	Native	*Maytenus boaria*	10.25
CON 2	Native	*Maytenus disticha*	0.25
CON 2	Native	*Pinus sp.*	0.025
CON 2	Native	*Quinchamalium chilense*	1
CON 2	Native	*Rumex acetosella*	5.25
CON 2	Native	*Viola reichei*	0.5
CON 2	Native	*Apera interrupta*	2
CON 2	Native	*Berberis microphylla*	4.25
CON 2	Native	*Colletia hystrix*	27
CON 2	Native	*Conyza boelckei*	2.5
CON 2	Native	*Holcus lanatus*	0.5
CON 2	Native	*Hordeum comosum*	2
CON 2	Native	*Loasa bergii*	0.05
CON 2	Native	*Maytenus boaria*	2.5
CON 2	Native	*Quinchamalium chilense*	3.75
CON 2	Native	*Rumex acetosella*	6.5
CON 2	Native	*Schinus patagonicus*	0.25
CON 2	Plantation	*Pinus sp.*	0.1
CON 2	Plantation	*Poa compressa*	0.1
CON 2	Plantation	*Pinus sp.*	2
CON 2	Plantation	*Rumex acetosella*	1
CON 2	Plantation	*Viola reichei*	2
CON 2	Plantation	*Pinus sp.*	0.5
CON 2	Plantation	*Rumex acetosella*	1
MC	Clearcut	*Acaena splendens*	1.25
MC	Clearcut	*Apera interrupta*	12
MC	Clearcut	*Collomia biflora*	4
MC	Clearcut	*Hordeum comosum*	1.25
MC	Clearcut	*Rumex acetosella*	1.5
MC	Clearcut	*Acaena splendens*	35
MC	Clearcut	*Bromus setifolius*	0.025
MC	Clearcut	*Cirsium vulgare*	0.25
MC	Clearcut	*Collomia biflora*	1.025
MC	Clearcut	*Hordeum comosum*	1.25
MC	Clearcut	*Phacelia secunda*	0.5
MC	Clearcut	*Rumex acetosella*	1.25
MC	Clearcut	*Acaena splendens*	1.5
MC	Clearcut	*Apera interrupta*	5.25
MC	Clearcut	*Baccharis rhomboidalis*	5
MC	Clearcut	*Bromus setifolius*	0.3

MC	Clearcut	*Carduus thoermeri*	3
MC	Clearcut	*Cirsium vulgare*	0.275
MC	Clearcut	*Collomia biflora*	1.525
MC	Clearcut	*Festuca cabrerae*	5.75
MC	Clearcut	*Mutisia decurrens*	0.025
MC	Clearcut	*Pinus ponderosa*	0.75
MC	Clearcut	*Rumex acetosella*	10.75
MC	Clearcut	*Taraxacum officinale*	0.75
MC	Clearcut	*Viola reichei*	1.275
MC	Native	*Berberis darwinii*	2.5
MC	Native	*Berberis microphylla*	16.25
MC	Native	*Diostea juncea*	12.5
MC	Native	*Festuca magellanica*	51.25
MC	Native	*Holcus lanatus*	16.25
MC	Native	*Maytenus boaria*	1.25
MC	Native	*Nothofagus antarctica*	62.5
MC	Native	*Ribes magellanicum*	1.5
MC	Native	*Acaena pinnatifida*	0.5
MC	Native	*Avena sativa var. sativa*	18.75
MC	Native	*Baccharis rhomboidalis*	28.75
MC	Native	*Berberis microphylla*	3.75
MC	Native	*Festuca magellanica*	10
MC	Native	*Maytenus boaria*	2.75
MC	Native	*Nothofagus antarctica*	35
MC	Native	*Ribes magellanicum*	0.75
MC	Native	*Rumex acetosella*	5.75
MC	Native	*Acaena splendens*	5.75
MC	Native	*Apera interrupta*	1
MC	Native	*Avena sativa var. sativa*	10.5
MC	Native	*Berberis microphylla*	10.5
MC	Native	*Cirsium vulgare*	0.25
MC	Native	*Festuca magellanica*	1.75
MC	Native	*Festuca purpuracens*	6.25
MC	Native	*Hordeum comosum*	0.75
MC	Native	*Maytenus boaria*	0.525
MC	Native	*Maytenus disticha*	6.5
MC	Native	*Mutisia decurrens*	0.05
MC	Native	*Nothofagus antarctica*	28.75
MC	Native	*Potentilla vesca*	3.75
MC	Native	*Ribes magellanicum*	0.025
MC	Native	*Rumex acetosella*	5.5
MC	Native	*Taraxacum officinale*	0.25
MC	Plantation	*Pinus ponderosa*	1
PM	Clearcut	*Bromus coloratus*	50
PM	Clearcut	*Cirsium vulgare*	8
PM	Clearcut	*Cynoglossum creticum*	7
PM	Clearcut	*Cytisus scoparius*	0.25
PM	Clearcut	*Phacelia secunda*	0.25

PM	Clearcut	*Senecio sylvaticus*	3.75
PM	Clearcut	*Bromus coloratus*	27.5
PM	Clearcut	*Cirsium vulgare*	4.75
PM	Clearcut	*Cynoglossum creticum*	16.5
PM	Clearcut	*Phacelia secunda*	2
PM	Clearcut	*Senecio sylvaticus*	0.25
PM	Clearcut	*Uncinia tenuis*	3
PM	Clearcut	*Bromus coloratus*	14.25
PM	Clearcut	*Cirsium vulgare*	10.25
PM	Clearcut	*Cynoglossum creticum*	2.5
PM	Clearcut	*Cytisus scoparius*	33.75
PM	Clearcut	*Rosa rubiginosa*	20.5
PM	Native	*Crinodendron patagua*	7.5
PM	Native	*Luma apiculata*	15
PM	Native	*Austrocedrus chilensis*	1
PM	Native	*Berberis darwinii*	8
PM	Native	*Dasyphyllum diacanthoides*	6.25
PM	Native	*Diplolepis diemii*	0.5
PM	Native	*Luma apiculata*	1.25
PM	Native	*Pseudotsuga menziesii*	0.25
PM	Native	*Rosa rubiginosa*	0.25
PM	Native	*Berberis darwinii*	9.5
PM	Native	*Dasyphyllum diacanthoides*	2
PM	Native	*Maytenus disticha*	10
PM	Native	*Rosa rubiginosa*	0.25
PM	Plantation	*Nothofagus dombeyi*	1
QQ 2	Clearcut	*Acaena ovalifolia*	2.25
QQ 2	Clearcut	*Agrostis gigantea*	3.75
QQ 2	Clearcut	*Aristotelia chilensis*	0.75
QQ 2	Clearcut	*Cirsium vulgare*	8.75
QQ 2	Clearcut	*Conium maculatum*	2.75
QQ 2	Clearcut	*Crepis aff. setosa*	1.5
QQ 2	Clearcut	*Epilobium brachycarpum*	0.75
QQ 2	Clearcut	*Galium hypocarpium*	6.25
QQ 2	Clearcut	*Holcus lanatus*	31.25
QQ 2	Clearcut	*Lathyrus magellanicus*	1.5
QQ 2	Clearcut	*Prunella vulgaris*	0.5
QQ 2	Clearcut	*Ribes magellanicum*	11.25
QQ 2	Clearcut	*Stellaria media*	0.25
QQ 2	Clearcut	*Trifolium repens*	32.5
QQ 2	Clearcut	*Agrostis gigantea*	21.25
QQ 2	Clearcut	*Apera interrupta*	5
QQ 2	Clearcut	*Cirsium vulgare*	3.75
QQ 2	Clearcut	*Conium maculatum*	2.75
QQ 2	Clearcut	*Crepis aff. setosa*	3
QQ 2	Clearcut	*Holcus lanatus*	30
QQ 2	Clearcut	*Prunella vulgaris*	2.75
QQ 2	Clearcut	*Trifolium pratense*	1.25

QQ 2	Clearcut	*Trifolium repens*	38.75
QQ 2	Clearcut	*Aristotelia chilensis*	1
QQ 2	Clearcut	*Cirsium vulgare*	1
QQ 2	Clearcut	*Galium hypocarpium*	8.75
QQ 2	Clearcut	*Holcus lanatus*	51.25
QQ 2	Clearcut	*Lathyrus magellanicus*	2.75
QQ 2	Clearcut	*Lupinus sp*	3.75
QQ 2	Clearcut	*Rumex acetosella*	7.25
QQ 2	Clearcut	*Trifolium repens*	8.75
QQ 2	Native	*Chusquea culeou*	40
QQ 2	Native	*Nothofagus alpina*	2.5
QQ 2	Native	*Schinus patagonicus*	0.75
QQ 2	Native	*Aristotelia chilensis*	0.05
QQ 2	Native	*Azara microphylla*	1.5
QQ 2	Native	*Chusquea culeou*	58.75
QQ 2	Native	*Nothofagus alpina*	4.65
QQ 2	Native	*Pseudotsuga menziesii*	0.3
QQ 2	Native	*Aristotelia chilensis*	0.025
QQ 2	Native	*Chusquea culeou*	65
QQ 2	Native	*Nothofagus alpina*	1.525
QQ 2	Native	*Pseudotsuga menziesii*	3.5
QQ 3	Clearcut	*Alstroemeria aurea*	3.5
QQ 3	Clearcut	*Aristotelia chilensis*	82.5
QQ 3	Clearcut	*Azara microphylla*	3.75
QQ 3	Clearcut	*Pseudotsuga menziesii*	3.75
QQ 3	Clearcut	*Solanum valdiviense*	5
QQ 3	Clearcut	*Uncinia tenuis*	2.75
QQ 3	Clearcut	*Alstroemeria aurea*	4.5
QQ 3	Clearcut	*Aristotelia chilensis*	47.5
QQ 3	Clearcut	*Azara microphylla*	24
QQ 3	Clearcut	*Elymus magellanicus*	2.25
QQ 3	Clearcut	*Holcus lanatus*	1.75
QQ 3	Clearcut	*Rumex acetosella*	3.75
QQ 3	Clearcut	*Solanum valdiviense*	1.25
QQ 3	Clearcut	*Uncinia tenuis*	3.75
QQ 3	Clearcut	*Alstroemeria aurea*	18.25
QQ 3	Clearcut	*Aristotelia chilensis*	41.25
QQ 3	Clearcut	*Dactylis glomerata*	3.25
QQ 3	Clearcut	*Festuca rubra*	0.5
QQ 3	Clearcut	*Holcus lanatus*	1.5
QQ 3	Clearcut	*Uncinia tenuis*	10
QQ 3	Native	*Aristotelia chilensis*	10
QQ 3	Native	*Chusquea culeou*	73.75
QQ 3	Native	*Nothofagus dombeyi*	1
QQ 3	Native	*Nothofagus obliqua*	1
QQ 3	Native	*Pseudotsuga menziesii*	13
QQ 3	Native	*Vicia nigricans*	9
QQ 3	Native	*Acer pseudoplatanus o platanoides*	2.5

QQ 3	Native	*Alstroemeria aurea*	2.25
QQ 3	Native	*Aristotelia chilensis*	70
QQ 3	Native	*Chusquea culeou*	38.75
QQ 3	Native	*Hypochaeris radicata*	1.5
QQ 3	Native	*Nothofagus dombeyi*	1
QQ 3	Native	*Pseudotsuga menziesii*	4
QQ 3	Native	*Vicia nigricans*	2.5
QQ 3	Native	*Viola reichei*	2.5
QQ 3	Native	*Chusquea culeou*	99.25
QQ 3	Native	*Nothofagus dombeyi*	1
QQ 3	Native	*Vicia nigricans*	0.75
QQ 3	Plantation	*Alstroemeria aurea*	7.75
QQ 3	Plantation	*Berberis darwinii*	0.5
QQ 3	Plantation	*Pseudotsuga menziesii*	0.25
QQ 3	Plantation	*Vicia nigricans*	1.25
QQ 3	Plantation	*Alstroemeria aurea*	1.25
SJ 1	Clearcut	*Acaena splendens*	21.25
SJ 1	Clearcut	*Bromus tectorum*	2.875
SJ 1	Clearcut	*Euphorbia hieronymi*	1.025
SJ 1	Clearcut	*Montiopsis aff. gayana*	0.25
SJ 1	Clearcut	*Rumex acetosella*	0.5
SJ 1	Clearcut	*Acaena splendens*	13.275
SJ 1	Clearcut	*Apera interrupta*	0.025
SJ 1	Clearcut	*Euphorbia hieronymi*	0.025
SJ 1	Clearcut	*Pinus ponderosa*	31.25
SJ 1	Clearcut	*Rumex acetosella*	3.375
SJ 1	Clearcut	*Apera interrupta*	0.025
SJ 1	Clearcut	*Epilobium brachycarpum*	0.275
SJ 1	Clearcut	*Euphorbia hieronymi*	2
SJ 1	Clearcut	*Rumex acetosella*	6.5
SJ 1	Native	*Acaena ovalifolia*	21.5
SJ 1	Native	*Bromus catharticus*	33
SJ 1	Native	*Claytonia perfoliata*	6.75
SJ 1	Native	*Hypochaeris radicata*	1.25
SJ 1	Native	*Ribes magellanicum*	1.5
SJ 1	Native	*Rumex acetosella*	8.75
SJ 1	Native	*Stellaria media*	1.25
SJ 1	Native	*Taraxacum officinale*	2
SJ 1	Native	*Trifolium repens*	5.25
SJ 1	Native	*Acaena ovalifolia*	33.75
SJ 1	Native	*Claytonia perfoliata*	51.25
SJ 1	Native	*Lomatia hirsuta*	43.75
SJ 1	Native	*Ribes magellanicum*	2.5
SJ 1	Native	*Schinus patagonicus*	2.5
SJ 1	Native	*Claytonia perfoliata*	20
SJ 1	Native	*Ribes magellanicum*	90
SJ 1	Plantation	*Pinus ponderosa*	2
SJ 1	Plantation	*Ribes magellanicum*	2

SJ 1	Plantation	*Pinus ponderosa*	1
SJ 1	Plantation	*Pinus ponderosa*	1
SJ 2	Clearcut	*Acaena splendens*	11.25
SJ 2	Clearcut	*Pappostipa speciosa*	27.5
SJ 2	Clearcut	*Pinus ponderosa*	47.5
SJ 2	Clearcut	*Rumex acetosella*	8.25
SJ 2	Clearcut	*Acaena splendens*	5
SJ 2	Clearcut	*Elymus magellanicus*	21.25
SJ 2	Clearcut	*Pappostipa speciosa*	3.75
SJ 2	Clearcut	*Pinus ponderosa*	23.75
SJ 2	Clearcut	*Rumex acetosella*	0.5
SJ 2	Clearcut	*Acaena splendens*	3.75
SJ 2	Clearcut	*Apera interrupta*	0.75
SJ 2	Clearcut	*Pinus ponderosa*	20
SJ 2	Clearcut	*Rumex acetosella*	5
SJ 2	Native	*Apera interrupta*	1
SJ 2	Native	*Baccharis rufescens var. vetanicola*	3.75
SJ 2	Native	*Berberis microphylla*	5
SJ 2	Native	*Colletia hystrix*	12.5
SJ 2	Native	*Festuca pallescens*	1
SJ 2	Native	*Galium richardianum*	1
SJ 2	Native	*Geranium magellanicum*	0.25
SJ 2	Native	*Hypochaeris patagonica*	0.5
SJ 2	Native	*Rumex acetosella*	2.75
SJ 2	Native	*Schinus patagonicus*	1.25
SJ 2	Native	*Uncinia tenuis*	0.75
SJ 2	Native	*Austrocedrus chilensis*	55
SJ 2	Native	*Bromus setifolius*	0.25
SJ 2	Native	*Colletia hystrix*	45
SJ 2	Native	*Potentilla vesca*	0.75
SJ 2	Native	*Rumex acetosella*	3
SJ 2	Native	*Schinus patagonicus*	5
SJ 2	Native	*Uncinia tenuis*	1.25
SJ 2	Native	*Acaena splendens*	7
SJ 2	Native	*Apera interrupta*	7.25
SJ 2	Native	*Balbisia gracilis*	17.5
SJ 2	Native	*Collomia biflora*	1.5
SJ 2	Native	*Geranium magellanicum*	0.25
SJ 2	Native	*Maytenus boaria*	6.75
SJ 2	Native	*Mutisia spinosa*	1.75
SJ 2	Native	*Rumex acetosella*	3.5
SJ 2	Native	*Schinus patagonicus*	0.25
SJ 2	Native	*Taraxacum officinale*	0.5
SJ 2	Native	*Uncinia tenuis*	8.25
SJ 2	Native	*Viola reichei*	1.25
SJ 3	Clearcut	*Acaena splendens*	13
SJ 3	Clearcut	*Apera interrupta*	2.75
SJ 3	Clearcut	*Cirsium vulgare*	5.25

SJ 3	Clearcut	*Epilobium brachycarpum*	5.5
SJ 3	Clearcut	*Erodium cicutarium*	2.5
SJ 3	Clearcut	*Euphorbia hieronymi*	3.25
SJ 3	Clearcut	*Rumex acetosella*	28.75
SJ 3	Clearcut	*Acaena splendens*	10.75
SJ 3	Clearcut	*Apera interrupta*	2.75
SJ 3	Clearcut	*Cirsium vulgare*	2.75
SJ 3	Clearcut	*Epilobium brachycarpum*	1
SJ 3	Clearcut	*Euphorbia hieronymi*	7.25
SJ 3	Clearcut	*Rumex acetosella*	35
SJ 3	Clearcut	*Acaena splendens*	2
SJ 3	Clearcut	*Apera interrupta*	2
SJ 3	Clearcut	*Cirsium vulgare*	1.5
SJ 3	Clearcut	*Euphorbia hieronymi*	2.5
SJ 3	Clearcut	*Pinus sp.*	5
SJ 3	Clearcut	*Rumex acetosella*	25
SJ 3	Native	*Austrocedrus chilensis*	12.5
SJ 3	Native	*Colletia hystrix*	1.25
SJ 3	Native	*Rumex acetosella*	2.5
SJ 3	Native	*Uncinia tenuis*	4.5
SJ 3	Native	*Apera interrupta*	2.75
SJ 3	Native	*Balbisia gracilis*	2.5
SJ 3	Native	*Berberis microphylla*	5
SJ 3	Native	*Colletia hystrix*	15.5
SJ 3	Native	*Mutisia spinosa*	2
SJ 3	Native	*Pseudotsuga menziesii*	0.25
SJ 3	Native	*Rumex acetosella*	1
SJ 3	Native	*Uncinia tenuis*	5.25
SJ 3	Native	*Apera interrupta*	6.25
SJ 3	Native	*Balbisia gracilis*	21.25
SJ 3	Native	*Berberis darwinii*	0.75
SJ 3	Native	*Colletia hystrix*	13
SJ 3	Native	*Epilobium brachycarpum*	0.25
SJ 3	Native	*Mutisia spinosa*	0.75
SJ 3	Native	*Rumex acetosella*	3.25
SJ 3	Plantation	*Pinus ponderosa*	1
SJ 3	Plantation	*Pinus ponderosa*	1
SJ 3	Plantation	*Pinus ponderosa*	1
VM	Clearcut	*Aristotelia chilensis*	28.5
VM	Clearcut	*Cirsium vulgare*	3
VM	Clearcut	*Cytisus scoparius*	6.25
VM	Clearcut	*Geranium magellanicum*	5.25
VM	Clearcut	*Holcus lanatus*	12.5
VM	Clearcut	*Hypochaeris radicata*	0.375
VM	Clearcut	*Lathyrus magellanicus*	0.375
VM	Clearcut	*Phacelia secunda*	4
VM	Clearcut	*Pseudotsuga menziesii*	26.25
VM	Clearcut	*Vicia nigricans*	6.5

VM	Clearcut	*Viola reichei*	0.75
VM	Clearcut	*Cirsium vulgare*	3.5
VM	Clearcut	*Galium hypocarpium*	0.75
VM	Clearcut	*Gamochaeta neuquensis*	0.75
VM	Clearcut	*Geranium magellanicum*	0.25
VM	Clearcut	*Holcus lanatus*	9.5
VM	Clearcut	*Phacelia secunda*	22.5
VM	Clearcut	*Pseudotsuga menziesii*	2.5
VM	Clearcut	*Rumex acetosella*	0.25
VM	Clearcut	*Verbascum thapsus*	0.25
VM	Clearcut	*Acaena ovalifolia*	3
VM	Clearcut	*Aristotelia chilensis*	10
VM	Clearcut	*Geranium magellanicum*	1.75
VM	Clearcut	*Nothofagus dombeyi*	25
VM	Clearcut	*Pseudotsuga menziesii*	19.25
VM	Clearcut	*Ribes magellanicum*	3
VM	Clearcut	*Rosa rubiginosa*	1.5
VM	Native	*Alstroemeria aurea*	4.25
VM	Native	*Aristotelia chilensis*	1
VM	Native	*Berberis darwinii*	8.25
VM	Native	*Maytenus boaria*	0.75
VM	Native	*Nothofagus dombeyi*	0.75
VM	Native	*Osmorhiza chilensis*	5.75
VM	Native	*Ribes magellanicum*	6.25
VM	Native	*Schinus patagonicus*	2.5
VM	Native	*Vicia nigricans*	1.5
VM	Native	*Acaena ovalifolia*	3.75
VM	Native	*Adenocaulon chilense*	1.75
VM	Native	*Alstroemeria aurea*	2.25
VM	Native	*Berberis darwinii*	1
VM	Native	*Colletia hystrix*	1.25
VM	Native	*Gavilea sp.*	1.5
VM	Native	*Holcus lanatus*	0.75
VM	Native	*Maytenus boaria*	1.5
VM	Native	*Maytenus disticha*	1.25
VM	Native	*Mutisia decurrens*	1.25
VM	Native	*Myoschilos oblongum*	0.25
VM	Native	*Osmorhiza chilensis*	15.25
VM	Native	*Pseudotsuga menziesii*	0.5
VM	Native	*Ribes magellanicum*	5
VM	Native	*Schinus patagonicus*	5.75
VM	Native	*Taraxacum officinale*	3.5
VM	Native	*Uncinia tenuis*	1.25
VM	Native	*Vicia nigricans*	0.75
VM	Native	*Alstroemeria aurea*	6.75
VM	Native	*Aristotelia chilensis*	1
VM	Native	*Berberis darwinii*	1.5
VM	Native	*Chusquea culeou*	12.5

VM	Native	*Osmorhiza chilensis*	8.75
VM	Native	*Pinus ponderosa*	0.25
VM	Native	*Prunus avium*	1.25
VM	Native	*Pseudotsuga menziesii*	1.75
VM	Native	*Schinus patagonicus*	1
VM	Native	*Vicia nigricans*	0.25
VM	Plantation	*Pseudotsuga menziesii*	0.75
VM	Plantation	*Pseudotsuga menziesii*	0.75
VM	Plantation	*Vicia nigricans*	0.25
VM	Plantation	*Pseudotsuga menziesii*	25.375

Code S1: Hierarchical linear regression model for richness.

```
# rich is total richness response variable.
# origin (k) refers to native or nonnative species.
# site (j) corresponds with different precipitation level, j: 1 to 16.
# treat refers to community type: native, clearcut (treatC), plantation (treatP).

 model {

  # subsample-level modeling

    for(i in 1:n) {

    rich[i] ~ dpois(lambda[i])
    log(lambda[i]) <- αN [origin[i],site[i]] + αC [origin[i],site[i]] * treatC[i] + αP [origin[i],site[i]] *
treatP[i]

    }

   # site-level modeling

    for (j in 1:nsite) {
    for (k in 1:2) {

    αN [k,j] <- β0N + β1N [k]* prec[j]

    αC [k,j] <- β0 C + β1C [k]* prec[j]

    αP [k,j] <- β0 P + β1P [k]* prec[j]

      }
     }

   # priors

    for (k in 1:2) {

    β1N [k]  ~ dt(0,1,5)
    β1C [k]  ~ dt(0,1,5)
    β1P [k]  ~ dt(0,1,5)
    }

    β0N  ~ dt(0,1,5)
    β0C  ~ dt(0,1,5)
    β0P ~ dt(0,1,5)


    }
```

Code S2: Hierarchical linear regression model for cover.

```
# cover is total cover response variable.
# origin (k) refers to native or nonnative species.
# site (j) corresponds with different precipitation level, j: 1 to 16.
# treat refers to community type: native, clearcut (treatC), plantation (treatP).


  model {

  # subsample-level modeling

  for(i in 1:n) {

  cover[i] ~ dnorm(mu[i], tau)

  mu[i] <-  αN [origin[i],site[i]] + αC [origin[i],site[i]] * treatC[i] + αP [origin[i],site[i]] * treatP[i]

  }

  # site-level modeling

 for (j in 1:nsite) {
 for (k in 1:2) {

  αN [k,j] <- β0N + β1N [k]* prec[j]

  αC [k,j] <- β0 C + β1C [k]* prec[j]

  αP [k,j] <- β0 P + β1P [k]* prec[j]


  }
  }

  # priors

  for (k in 1:2) {

  β1N [k]  ~ dt(0,1,5)
  β1C [k]  ~ dt(0,1,5)
  β1P [k]  ~ dt(0,1,5)
  }

  β0N  ~ dt(0,1,5)
  β0 C  ~ dt(0,1,5)
  β0 P  ~ dt(0,1,5)
```

```
    sigma ~ dunif(0, 10)
    tau <- pow(sigma, -2)


    }
```

Code S3: Hierarchical linear regression model for proportion of nonnative richness.

```
        # richNN is nonnative richness and ntot is total richness
        # site (j) corresponds with different precipitation level, j: 1 to 16.
        # treat refers to community type: native, clearcut (treatC), plantation (treatP).

    model {

      # subsample-level modeling

      for(i in 1:n) {

      richNN[i] ~ dbin(p[i],ntot[i])
      logit(p[i]) <- αN [site[i]] + αC [site[i]] * treatC[i] + αP [site[i]] * treatP[i]


      }

      # site-level modeling

      for (j in 1:nsite) {


      αN [j] <- β0N + β1N * prec[j]

      αC [j] <- β0 C + β1C * prec[j]

      αP [j] <- β0 P + β1P * prec[j]


      }

      # priors

      β1N  ~ dt(0,1,5)
      β1C  ~ dt(0,1,5)
      β1P  ~ dt(0,1,5)

      β0N  ~ dt(0,1,5)
      β0C  ~ dt(0,1,5)
      β0P  ~ dt(0,1,5)


      }
```

Code S4: Hierarchical linear regression model for proportion of nonnative cover.

```
        # covNN is nonnative cover and tot is total cover
        # site (j) corresponds with different precipitation level, j: 1 to 16.
        # treat refers to community type: native, clearcut (treatC), plantation (treatP).

    model {

      # subsample-level modeling

      for(i in 1:n) {

      covNN[i] ~ dbin(p[i],tot[i])
      logit(p[i]) <- αN [site[i]] + αC [site[i]] * treatC[i] + αP [site[i]] * treatP[i]

      }

      # site-level modeling

      for (j in 1:nsite) {


      αN [j] <- β0N + β1N * prec[j]

      αC [j] <- β0 C + β1C * prec[j]

      αP [j] <- β0 P + β1P * prec[j]

      }

      # priors

      β1N  ~ dt(0,1,5)
      β1C  ~ dt(0,1,5)
      β1P  ~ dt(0,1,5)

      β0N  ~ dt(0,1,5)
      β0C  ~ dt(0,1,5)
      β0P  ~ dt(0,1,5)

      }
```

Code S5: Hierarchical linear regression model for Shannon diversity index.

```
    # shannon is the Shannon diversity index.
    # site (j) corresponds with different precipitation level, j: 1 to 16.
    # treat refers to community type: native, clearcut (treatC), plantation (treatP).

     model {
```

```
# subsample-level modeling

for(i in 1:n) {

shannon[i] ~ dnorm(mu[i], tau)

mu[i] <- αN [site[i]] + αC [site[i]] * treatC[i] + αP [site[i]] * treatP[i]    }

# site-level modeling

for (j in 1:nsite) {


αN [j] <- β0N + β1N * prec[j]

αC [j] <- β0 C + β1C * prec[j]

αP [j] <- β0 P + β1P * prec[j]

}

# priors

β1N  ~ dt(0,1,5)
β1C  ~ dt(0,1,5)
β1P  ~ dt(0,1,5)

β0N  ~ dt(0,1,5)
β0C  ~ dt(0,1,5)
β0P  ~ dt(0,1,5)

sigma  ~ dunif(0,10)
tau <- pow(sigma,-2)

}
```