

Fitton Green Natural Area Fire Effects Vegetation Monitoring



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Final Report

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Institute for Applied Ecology



PREFACE

IAE is a non-profit organization whose mission is conservation of native ecosystems through restoration, research and education. IAE provides services to public and private agencies and individuals through development and communication of information on ecosystems, species, and effective management strategies. Restoration of habitats, with a concentration on rare and invasive species, is a primary focus. IAE conducts its work through partnerships with a diverse group of agencies, organizations and the private sector. IAE aims to link its community with native habitats through education and outreach.



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Cover photographs: View looking southwest from the main meadow at Fitton Green Natural Area. *Photo by Andy Neill.*

SUGGESTED CITATION

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FINAL REPORT

1. INTRODUCTION

Fitton Green Natural Area is a 308-acre property managed by Benton County Natural Areas and Parks Department. The natural area contains three primary vegetation types: oak savanna, grassland and mixed forest, composed of Douglas-fir, bigleaf maple, and Oregon white oak. The focus area for this project is 20 acres of oak savanna and grassland encompassed by 43 acres of the same habitat types (Figure 1). Prescribed burning is an important tool for maintaining oak savanna and grassland at Fitton Green Natural Area by reducing thatch, abundance of non-native species, encroachment of shrubs and trees and promote native species diversity. Benton County Natural Areas and Parks Department facilitated a fall burn in October 2015 and contracted with the Institute for Applied Ecology (IAE) to evaluate the impacts of prescribed fire on the vegetation layer in oak savanna and grassland habitat at Fitton Green Natural Area. This report is a summary of the results and a comparison of pre- and post-burn vegetation data.



Figure 1. Overview map of Fitton Green Natural Area and fire monitoring project area.

The project area has a primarily southwest exposure and well-drained soils with 12 to 60 percent slopes (USDA NRCS, 2009). Historically, these slopes were dominated by Roemer's fescue (*Festuca roemerii*) grassland, Oregon white oak (*Quercus garryana*) woodland and mixed white oak and Douglas-fir (*Pseudotsuga menziesii*) forest. Regular burning by local tribes prior to European settlement in the Willamette Valley helped maintain the grassland and oak savanna at Fitton Green Natural Area by preventing encroachment of woody plants. The grassland and savanna is host to many native plants and animals that rely on these habitats to persist, including the Taylor's checkerspot butterfly (*Euphydryas*

editha taylori) (TCB), a federally endangered species. The decline of TCB is due to habitat loss throughout its historical range and low abundance of nectar and food plants TCB requires to persist.

In Oregon, TCB has been reduced to two populations, both in Benton County. Currently, Fitton Green does not have resident populations of Taylor's checkerspot butterfly, but meadows located within 1.5 miles of the project area do support TCB. This suggests that Fitton Green could be a potential site for recolonization or reintroduction. The Benton County Prairie Species Habitat Conservation Plan (HCP, 2010) serves as a guideline for prairie restoration efforts on Benton County properties. Restoration efforts at Fitton Green have been conducted with the intention of creating TCB habitat either to attract TCB or for future butterfly reintroduction. In addition to fire, management actions to improve TCB habitat at Fitton Green have also included mechanical shrub and tree removal, herbicide treatments, and plant community augmentation through planting and seeding of native plant species (see Benton County HCP for the TCB management plan).

2. GOALS AND OBJECTIVES

The goal of this project is to examine the effects of a prescribed burn on vegetation and ground cover in the large meadow at Fitton Green Natural Area (Figure 1). The primary objective of this project is to compare data from pre- and post-burn vegetation surveys in 2015 and 2016 collected at Fitton Green Natural Area. The results presented in this report will inform future management decisions to improve oak savanna and grassland habitats, and more specifically, Taylor's checkerspot butterfly habitat at Fitton Green Natural Area.

3. METHODS

The Benton County Natural Areas and Parks Department coordinated a prescribed burn of the South Meadow at Fitton Green Natural Area in fall 2015. Prior to the burn, vegetation and substrate data were collected on 18 randomly selected 2m x 2m (4-m²) plots within the project area. Plot locations were selected using a grid overlay on an aerial map of the project area and a random number generator was used to select coordinates within the grid. Plots located on roads or other heavily used areas were rejected and another plot location was randomly selected. Percent cover of each species on each plot was estimated by averaging the data collected from 4-1m x 1m subplots around plot center to 4-m² plot area. For each plot, percent cover of each plant species, as well as thatch, moss, bare soil, and rock were collected (see Appendices). Plot cover estimates were rounded off to the nearest integer below 5%, and to the nearest 5% increment from 5% to 100%. Layering of species cover estimates can result in total species cover estimates greater than 100%. The process of plot selection and data collection was repeated in summer 2016.

Data were collected and summarized by species and then by origin (native or introduced), growth form (graminoid, forb, or woody), and life history (annual, perennial, or biennial). Species information was obtained from USDA Plants Database (2016). Pre- and post-burn species cover and richness data were compared using a two sampled t-test assuming unequal variances and a significance level of $p < 0.05$.

4. RESULTS

As expected, one year after the burn at Fitton Green Natural Area there was significantly more bare ground and less thatch observed in the project area (Figure 2). Moss cover appeared to be higher following the burn but was only marginally significant. Cover of woody species before and after the prescribed burn was generally very low. Although cover of woody species was lower after the burn, it was not significantly different (Figure 2).

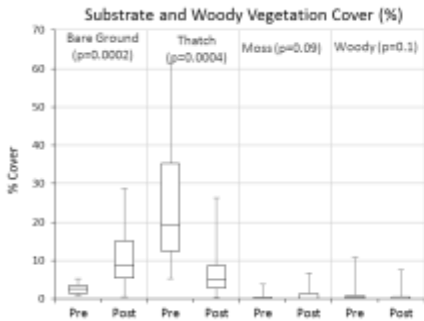


Figure 2 Box-and-whisker plots of substrate and woody species cover (n=18 and significance of $p < 0.05$).

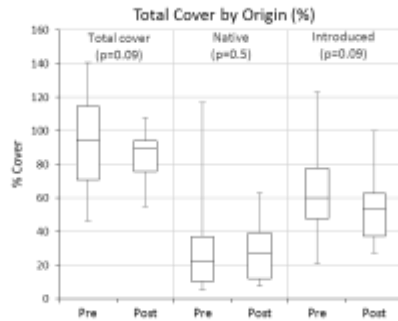


Figure 3 Box-and-whisker plots of total cover and cover by origin (n=18 and significance of $p < 0.05$).

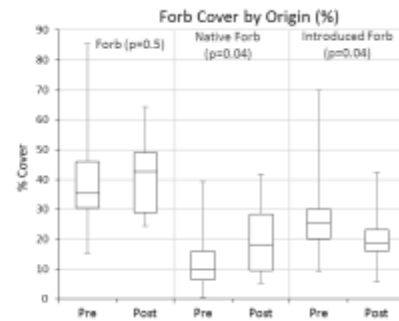


Figure 4 Box-and-whisker plots of total forb cover and cover of forbs by origin (n=18 and significance $p < 0.05$).

The data suggests total species cover in the sample plots appeared to be lower following the prescribed burn but this was only marginally significant. This appears to be primarily due to significantly lower cover of introduced species rather than changes to cover of native species one year after the prescribed burn (Figure 3). Plot cover before and after the burn was generally dominated by introduced perennial species (Table 1). Plant species with the highest average cover were also generally the most common (present in the highest number of plots). Total forb cover did not change following the burn. However, a significant decrease in cover of introduced forbs was accompanied by a significant increase in cover of native forbs following the burn (Figure 4). There was no significant change in either native or introduced graminoid cover following the burn (Figure 5).

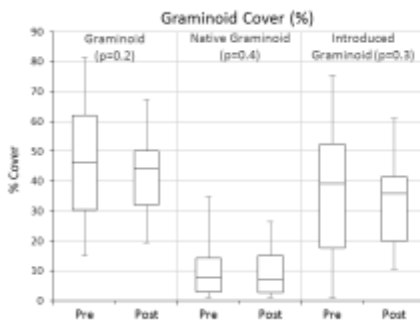


Figure 5 Box-and-whisker plots of total graminoid cover and cover of graminoids by origin (n=18 and significance $p < 0.05$).

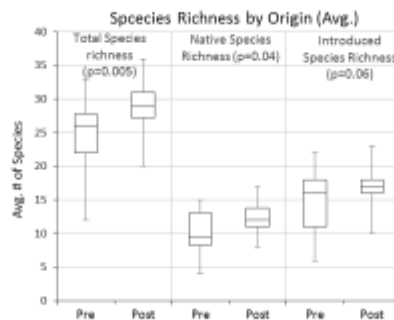


Figure 6 Box-and-whisker plots of average species richness per plot and species richness of forbs and graminoids (n=18 and significance $p < 0.05$).

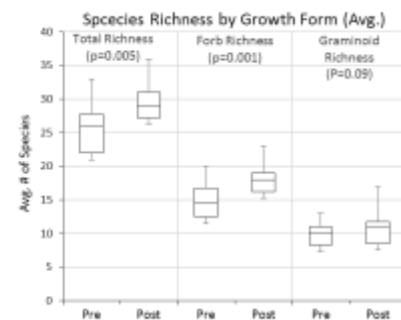


Figure 7 Box-and-whisker plots of average species richness per plot and species richness of forbs and graminoids (n=18 and significance $p < 0.05$).

Species richness (average number of species observed per plot) following the burn was significantly higher (Figure 6), which was mainly due to more post-fire observations of forb species and partially due to more frequent observations of graminoid species (Figure 6). Similarly, after the prescribed burn,

higher richness of species grouped by origin (native and introduced) suggests both native and introduced species benefited from the burn (Figure 7).

Table 1 List of most common and abundant species observed pre- and post-fire plots (n=18) at Fitton Green Natural Area.

Scientific name	Common name	Origin	Life History	Growth from	# of plots present		Avg. plot cover (%)	
					Pre-fire	Post-fire	Pre-fire	Post-fire
<i>Schedonorus arundinaceus</i>	tall fescue	Introduced	Perennial	Graminoid	8	11	13.3	8.8
<i>Fragaria virginiana</i>	Virginia strawberry	Native	Perennial	Forb	15	16	7.2	8.7
<i>Arrhenatherum elatius</i>	tall oatgrass	Introduced	Perennial	Graminoid	10	10	10.1	8.2
<i>Leucanthemum vulgare</i>	oxeye daisy	Introduced	Perennial	Forb	18	17	16.0	6.6
<i>Cynosurus echinatus</i>	hedgehog dogstail	Introduced	Annual	Graminoid	12	16	4.7	6.0
<i>Bromus sitchensis</i>	Sitka brome	Native	Perennial	Graminoid	8	14	1.3	2.6
<i>Daucus carota</i>	Queen Anne's lace	Introduced	Perennial	Forb	12	16	2.4	2.6
<i>Aira caryophyllea</i>	silver hairgrass	Introduced	Annual	Graminoid	11	12	0.8	2.1
<i>Plantago lanceolata</i>	narrowleaf plantain	Introduced	Perennial	Forb	13	11	1.8	2.1
<i>Elymus glaucus</i>	blue wildrye	Native	Perennial	Graminoid	15	14	3.0	1.8
<i>Dactylis glomerata</i>	orchard grass	Introduced	Perennial	Graminoid	9	15	2.3	1.7
<i>Geranium dissectum</i>	cutleaf geranium	Introduced	Annual	Forb	11	16	0.7	1.6
<i>Galium parisiense</i>	wall bedstraw	Introduced	Annual	Forb	8	15	0.2	1.1
<i>Hypochaeris radicata</i>	hairy cat's ear	Introduced	Perennial	Forb	12	12	0.9	1.0
<i>Torilis arvensis</i>	spreading hedgeparsley	Introduced	Annual	Forb	14	11	2.3	0.9
<i>Vicia sativa</i>	garden vetch	Introduced	Annual	Forb	16	13	1.1	0.8

5. DISCUSSION

Prescribed fire at Fitton Green Natural Area appears to be a useful management tool to control thatch, non-native species, and encroaching shrubs, improving conditions for native plant species one year after the burn. Although this study does not indicate a significant decrease in abundance of woody plants, the low abundance of woody species prior to and following the prescribed burn indicates that past management actions (i.e., burning, herbicide, and mechanical) at Fitton Green Natural Area are achieving the desired effect of preventing woody encroachment.

In general, native forbs and graminoids associated with oak savanna and grassland are fire tolerant and can regenerate from surviving seed or caudex after fire. Thatch buildup, mostly from non-native species (e.g., tall fescue and tall oatgrass), can result in higher temperatures during the fire that can decrease the survival rate of native and non-native seed and caudices. The reduction of thatch can expose bare soil which increases the likelihood of seed-soil contact. This can provide greater success when restoration activities include seeding native forbs and graminoids (Maret and Wilson 2005). However, seed from invasive species can quickly occupy a site, especially if competing native plants are reduced or absent. Augmenting with seed of native plant species for habitat restoration is typically most successful when done the same year following the burn and after the fall rains have begun. However, the greater abundance of bare ground one year after fire suggest that seeding the year following a burn may still be more successful than seeding areas that have not recently been burned. It appears that in the short term, species composition can shift in favor of native species after a burn, but the long term effects of prescribed fire at Fitton Green Natural Area require further investigation. A higher frequency of fire

could have the opposite effect and shift species composition to include more weedy or non-native annual species. Greater native forb abundance is likely to provide more food and nectar plants for oak savanna and grassland associated animals such as the Taylor's checkerspot butterfly. Although there was less total species cover one year after the burn, there was greater average species richness on the plots. This may be due to less obstruction by thatch, which increases the ability of the data collector to see smaller plants, primarily forbs (e.g., wall bedstraw and species belonging to the pea family) that could have been overlooked in 2015.

It is likely that changes in cover and richness are a result of the prescribed fire in 2015, but the changes may be short-lived. The thatch is likely to quickly return to pre-burn conditions, and with no augmentation with native seed or reduction of non-native grasses, the likelihood of maintaining or improving upon the native plant composition is lower.

It is possible that the timing of the monitoring of the sample plots (June/July) resulted in the surveyors missing early annuals and spring flowering bulbs that had already senesced. In general these plants are small and would have had little impact on cover totals. However, the presence of these species could have had influenced analyses of richness. Multiple surveys of established plots, instead of randomly selected plot locations, could have improved observations of overall species composition but would have not likely changed the results. The timing of the surveys could have also missed germinating seeds that may have also senesced by summer. Height of plot vegetation was not assessed, and might be added to the variables monitored in the future, since taller thatch or vegetation may make access to food and nectar plants by TCB difficult.

6. CONCLUSIONS

Prescribed fire at Fitton Green Natural Area reduced thatch and improved availability of bare soil one year after fire. In the short term, the plant composition became more diverse, with a greater cover and richness of native forbs, following the fire. Although fire is a useful management tool to maintain diverse oak savannas and grasslands, understanding the long-term effects of prescribed fire at Fitton Green Natural Area to enhance potential habitat for species like the Taylor's checkerspot butterfly require further investigation.

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APPENDIX A

Pre- and post-fire plot data

Table A1. Alphabetical list of species observed on fire monitoring plots in 2015 (pre-fire) and 2016 (post-fire). Species codes are referenced to species in the species list (Appendix B).

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	1	Bare Ground	0	0	2	2	1
Pre-Fire	1	Moss	0	2	0	0	0.5
Pre-Fire	1	Thatch	5	10	2	4	5.25
Pre-Fire	1	Rock	0	0	1	1	0.5
Pre-Fire	1	ARRELA	10	30	15	5	15
Pre-Fire	1	DAUCAR	1	1	3	3	2
Pre-Fire	1	PRUVUL	5	1	1	1	2
Pre-Fire	1	LEUVUL	4	5	6	8	5.75
Pre-Fire	1	HYPRAD	1	0	1	0	0.5
Pre-Fire	1	CYNECH	10	3	5	10	7
Pre-Fire	1	VULBRO	1	0	0	1	0.5
Pre-Fire	1	MADGLO	2	1	1	1	1.25
Pre-Fire	1	LINBIE	5	3	5	10	5.75
Pre-Fire	1	TAECAP	15	2	1	5	5.75
Pre-Fire	1	AGRSTO	2	1	1	2	1.5
Pre-Fire	1	AIRCAR	1	1	1	2	1.25
Pre-Fire	1	FRAVIR	1	2	10	4	4.25
Pre-Fire	1	BROHOR	2	1	1	5	2.25
Pre-Fire	1	VICSAT	1	1	1	4	1.75
Pre-Fire	1	VICHIR	1	1	1	3	1.5
Pre-Fire	1	GERDIS	1	0	1	0	0.5
Pre-Fire	1	CENERY	0	1	1	1	0.75
Pre-Fire	1	Sidalcea sp.	0	8	2	0	2.5
Pre-Fire	1	PLALAN	0	2	2	3	1.75
Pre-Fire	1	CARTUM	0	7	3	0	2.5
Pre-Fire	1	FESROE	0	4	0	0	1
Pre-Fire	1	VENDUB	0	1	3	1	1.25
Pre-Fire	1	MYODIS	0	1	0	0	0.25
Pre-Fire	1	ELYGLA	0	0	2	0	0.5
Pre-Fire	1	DANCAL	0	0	0	4	1
Pre-Fire	2	Bare Ground	2	4	1	0	1.75
Pre-Fire	2	Moss	0	0	0	0	0
Pre-Fire	2	Thatch	5	10	20	25	15
Pre-Fire	2	Rock	0	0	0	0	0
Pre-Fire	2	ELYGLA	10	3	0	1	3.5
Pre-Fire	2	DACGLO	8	5	15	30	14.5
Pre-Fire	2	LEUVUL	15	20	15	15	16.25
Pre-Fire	2	DAUCAR	10	10	5	4	7.25
Pre-Fire	2	FESROE	7	2	0	0	2.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	2	POTGRA	2	0	2	0	1
Pre-Fire	2	HYPRAD	1	0	0	1	0.5
Pre-Fire	2	CRAMON	1	2	0	0	0.75
Pre-Fire	2	CYNECH	4	9	2	3	4.5
Pre-Fire	2	TORARV	1	1	8	5	3.75
Pre-Fire	2	LINBIE	2	3	0	1	1.5
Pre-Fire	2	CLIDOU	3	3	4	1	2.75
Pre-Fire	2	SCHARU	4	1	3	5	3.25
Pre-Fire	2	PLALAN	1	1	0	0	0.5
Pre-Fire	2	ERILAN	1	0	0	0	0.25
Pre-Fire	2	FRAVIR	3	7	2	1	3.25
Pre-Fire	2	SHEARV	1	1	1	1	1
Pre-Fire	2	ACHMIL	3	1	1	0	1.25
Pre-Fire	2	VICSAT	1	1	1	1	1
Pre-Fire	2	BROSIT	1	1	0	4	1.5
Pre-Fire	2	GERDIS	0	1	1	1	0.75
Pre-Fire	2	PTEAQU	0	2	0	0	0.5
Pre-Fire	2	LOLPER	0	1	0	0	0.25
Pre-Fire	2	AGRSTO	0	2	1	0	0.75
Pre-Fire	2	Woody Debris	0	0	0	10	2.5
Pre-Fire	2	AVESAT	0	0	0	1	0.25
Pre-Fire	2	BRASYL	0	0	0	1	0.25
Pre-Fire	2	Lathyrus sp.	0	0	0	1	0.25
Pre-Fire	3	Bare Ground	0	2	3	1	1.5
Pre-Fire	3	Moss	0	0	0	0	0
Pre-Fire	3	Thatch	70	50	60	40	55
Pre-Fire	3	Rock	0	1	1	0	0.5
Pre-Fire	3	PSEMEN	99	90	90	99	94.5
Pre-Fire	3	RUBURS	1	0	0	4	1.25
Pre-Fire	3	ELYGLA	0	5	5	6	4
Pre-Fire	3	BROSIT	4	10	10	1	6.25
Pre-Fire	3	SCHARU	2	10	10	1	5.75
Pre-Fire	3	CLIDOU	2	0	10	1	3.25
Pre-Fire	3	TORARV	10	5	4	8	6.75
Pre-Fire	3	GERDIS	5	1	1	3	2.5
Pre-Fire	3	VICHIR	1	1	1	1	1
Pre-Fire	3	LEUVUL	5	3	2	0	2.5
Pre-Fire	3	MADGLO	1	4	5	4	3.5
Pre-Fire	3	QUEGAR	1	0	0	0	0.25
Pre-Fire	3	CYNECH	1	1	0	0	0.5
Pre-Fire	3	LINBIE	0	1	0	0	0.25
Pre-Fire	3	VICSAT	0	2	3	5	2.5
Pre-Fire	3	Carex sp.	0	1	0	0	0.25
Pre-Fire	3	DACGLO	0	1	3	1	1.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	3	AIRCAR	0	1	0	1	0.5
Pre-Fire	3	ACHMIL	0	0	2	2	1
Pre-Fire	3	DANCAL	0	0	1	0	0.25
Pre-Fire	3	PTEAQU	0	0	3	0	0.75
Pre-Fire	3	FRAVIR	0	0	1	1	0.5
Pre-Fire	3	ROSNUT	0	0	1	2	0.75
Pre-Fire	3	PLALAN	0	0	1	0	0.25
Pre-Fire	3	SANBIP	0	0	0	1	0.25
Pre-Fire	3	CRAMON	0	0	0	1	0.25
Pre-Fire	4	Bare Ground	2	1	4	5	3
Pre-Fire	4	Moss	0	1	0	0	0.25
Pre-Fire	4	Thatch	5	10	7	4	6.5
Pre-Fire	4	Rock	0	0	0	0	0
Pre-Fire	4	ARRELA	20	10	6	10	11.5
Pre-Fire	4	LEUVUL	15	15	6	7	10.75
Pre-Fire	4	CYNECH	10	7	8	15	10
Pre-Fire	4	CRAMON	3	0	0	1	1
Pre-Fire	4	HYPRAD	2	2	3	2	2.25
Pre-Fire	4	ELYGLA	1	0	0	1	0.5
Pre-Fire	4	RUBURS	2	1	0	2	1.25
Pre-Fire	4	MYODIS	1	0	0	0	0.25
Pre-Fire	4	ACHMIL	1	1	3	1	1.5
Pre-Fire	4	DAUCAR	6	8	15	7	9
Pre-Fire	4	TORARV	1	3	3	1	2
Pre-Fire	4	FRAVIR	2	3	2	3	2.5
Pre-Fire	4	Carex sp.	1	0	1	1	0.75
Pre-Fire	4	VICSAT	2	1	1	0	1
Pre-Fire	4	FESRUB	6	0	0	0	1.5
Pre-Fire	4	ERILAN	0	1	1	1	0.75
Pre-Fire	4	AVESAT	0	1	0	1	0.5
Pre-Fire	4	AGRSTO	0	3	1	1	1.25
Pre-Fire	4	DACGLO	0	4	5	4	3.25
Pre-Fire	4	MADGLO	0	1	0	0	0.25
Pre-Fire	4	LOTDEN	0	1	1	0	0.5
Pre-Fire	4	GALPAR	0	1	0	0	0.25
Pre-Fire	4	DICCON	0	1	0	0	0.25
Pre-Fire	4	PLALAN	0	0	1	0	0.25
Pre-Fire	4	DANCAL	0	0	1	0	0.25
Pre-Fire	4	POASEC	0	0	1	0	0.25
Pre-Fire	4	AIRCAR	0	0	1	1	0.5
Pre-Fire	4	PRUVUL	0	0	0	2	0.5
Pre-Fire	5	Bare Ground	8	3	1	1	3.25
Pre-Fire	5	Moss	0	0	1	0	0.25
Pre-Fire	5	Thatch	3	20	10	15	12

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	5	Rock	2	5	2	2	2.75
Pre-Fire	5	FESROE	3	10	5	2	5
Pre-Fire	5	ERILAN	1	3	0	1	1.25
Pre-Fire	5	LEUVUL	20	10	5	5	10
Pre-Fire	5	ELYGLA	4	4	3	3	3.5
Pre-Fire	5	LOTDEN	1	1	1	0	0.75
Pre-Fire	5	DAUCAR	8	2	2	5	4.25
Pre-Fire	5	FRAVIR	3	4	2	6	3.75
Pre-Fire	5	CYNECH	4	4	4	25	9.25
Pre-Fire	5	VULBRO	1	1	5	2	2.25
Pre-Fire	5	HYPRAD	3	3	4	3	3.25
Pre-Fire	5	GALPAR	1	0	0	0	0.25
Pre-Fire	5	AIRCAR	1	4	15	3	5.75
Pre-Fire	5	DANCAL	1	0	0	0	0.25
Pre-Fire	5	MYODIS	1	0	0	0	0.25
Pre-Fire	5	CENERY	1	1	0	0	0.5
Pre-Fire	5	BROHOR	1	2	6	1	2.5
Pre-Fire	5	MADGLO	1	1	8	4	3.5
Pre-Fire	5	BROCOR	0	1	0	0	0.25
Pre-Fire	5	CALTOL	0	1	1	1	0.75
Pre-Fire	5	PLALAN	0	2	2	1	1.25
Pre-Fire	5	CRAMON	0	1	0	0	0.25
Pre-Fire	5	TORARV	0	1	0	1	0.5
Pre-Fire	5	POASEC	0	1	0	0	0.25
Pre-Fire	5	GERDIS	0	1	1	1	0.75
Pre-Fire	5	VICSAT	0	1	1	1	0.75
Pre-Fire	5	CAMLEC	0	0	1	0	0.25
Pre-Fire	5	CARTUM	0	0	2	1	0.75
Pre-Fire	5	CLAPUR	0	0	1	0	0.25
Pre-Fire	5	TAECAP	0	0	0	1	0.25
Pre-Fire	5	LINBIE	0	0	0	1	0.25
Pre-Fire	6	Bare Ground	3	2	4	5	3.5
Pre-Fire	6	Moss	0	0	0	0	0
Pre-Fire	6	Thatch	10	5	5	5	6.25
Pre-Fire	6	Rock	0	0	1	0	0.25
Pre-Fire	6	LEUVUL	8	5	10	10	8.25
Pre-Fire	6	PTEAQU	1	2	5	0	2
Pre-Fire	6	CENERY	2	4	2	2	2.5
Pre-Fire	6	LINBIE	1	3	2	2	2
Pre-Fire	6	CARTUM	1	2	1	1	1.25
Pre-Fire	6	DANCAL	2	3	1	2	2
Pre-Fire	6	CALTOL	2	3	2	2	2.25
Pre-Fire	6	CYNECH	2	2	3	4	2.75
Pre-Fire	6	ERILAN	2	2	2	2	2

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	6	POTGRA	3	1	2	2	2
Pre-Fire	6	HYPRAD	3	2	2	3	2.5
Pre-Fire	6	PLALAN	4	6	3	3	4
Pre-Fire	6	Carex sp.	1	1	1	1	1
Pre-Fire	6	GERDIS	1	1	1	0	0.75
Pre-Fire	6	DACGLO	1	0	0	0	0.25
Pre-Fire	6	ARRELA	1	0	0	3	1
Pre-Fire	6	VICSAT	1	1	1	3	1.5
Pre-Fire	6	CLAPUR	1	1	1	0	0.75
Pre-Fire	6	AIRCAR	2	3	3	3	2.75
Pre-Fire	6	ECHCRU	1	0	0	0	0.25
Pre-Fire	6	VULBRO	1	1	1	2	1.25
Pre-Fire	6	BROHOR	1	1	1	0	0.75
Pre-Fire	6	ELYGLA	2	2	4	5	3.25
Pre-Fire	6	BROCOM	4	1	5	4	3.5
Pre-Fire	6	PRUVUL	0	3	3	2	2
Pre-Fire	6	LOTDEN	0	1	1	0	0.5
Pre-Fire	6	GALPAR	0	1	0	0	0.25
Pre-Fire	6	Lathyrus sp.	0	1	1	1	0.75
Pre-Fire	6	CRAMON	0	1	0	0	0.25
Pre-Fire	6	FESROE	0	0	0	4	1
Pre-Fire	6	FRAVIR	5	7	15	6	8.25
Pre-Fire	7	Bare Ground	0	3	4	0	1.75
Pre-Fire	7	Moss	0	2	0	0	0.5
Pre-Fire	7	Thatch	35	25	10	5	18.75
Pre-Fire	7	Rock	1	2	4	20	6.75
Pre-Fire	7	ARRELA	25	10	0	0	8.75
Pre-Fire	7	LEUVUL	10	5	20	20	13.75
Pre-Fire	7	BROHOR	10	3	15	15	10.75
Pre-Fire	7	SCHARU	5	5	25	40	18.75
Pre-Fire	7	PLALAN	3	15	3	2	5.75
Pre-Fire	7	DAUCAR	5	4	8	5	5.5
Pre-Fire	7	VICSAT	3	2	3	0	2
Pre-Fire	7	ELYREP	2	3	0	5	2.5
Pre-Fire	7	HYPRAD	2	1	0	0	0.75
Pre-Fire	7	RUMACE	3	2	0	0	1.25
Pre-Fire	7	CYNECH	10	3	4	3	5
Pre-Fire	7	TORARV	1	2	2	0	1.25
Pre-Fire	7	BRODIA	8	0	0	0	2
Pre-Fire	7	LOTDEN	3	3	0	0	1.5
Pre-Fire	7	MADGLO	2	1	1	2	1.5
Pre-Fire	7	MADSAT	2	0	0	0	0.5
Pre-Fire	7	VICHIR	3	2	2	3	2.5
Pre-Fire	7	GERDIS	1	1	1	1	1

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	7	AGRSTO	2	2	0	0	1
Pre-Fire	7	VENDUB	1	3	10	1	3.75
Pre-Fire	7	VULBRO	2	1	3	10	4
Pre-Fire	7	SONASP	1	0	0	3	1
Pre-Fire	7	DANCAL	1	0	0	0	0.25
Pre-Fire	7	LINBIE	0	1	1	0	0.5
Pre-Fire	7	CIRARV	0	2	0	0	0.5
Pre-Fire	7	Woody Debris	0	1	0	0	0.25
Pre-Fire	7	BROCOR	0	1	0	0	0.25
Pre-Fire	7	CIRVUL	0	0	1	5	1.5
Pre-Fire	7	PRUVUL	0	0	0	2	0.5
Pre-Fire	7	RUBURS	0	0	4	10	3.5
Pre-Fire	7	CLIDOU	0	0	1	5	1.5
Pre-Fire	7	POASEC	0	0	0	3	0.75
Pre-Fire	8	Bare Ground	0	1	5	2	2
Pre-Fire	8	Moss	0	0	0	0	0
Pre-Fire	8	Thatch	5	10	15	0	7.5
Pre-Fire	8	Rock	0	0	0	0	0
Pre-Fire	8	CYNECH	10	10	3	7	7.5
Pre-Fire	8	ARRELA	25	30	35	30	30
Pre-Fire	8	FRAVIR	30	30	8	20	22
Pre-Fire	8	LEUVUL	10	5	20	15	12.5
Pre-Fire	8	FESROE	15	25	35	30	26.25
Pre-Fire	8	AIRCAR	1	1	1	1	1
Pre-Fire	8	DAUCAR	2	1	1	4	2
Pre-Fire	8	BROSIT	3	3	8	3	4.25
Pre-Fire	8	PLALAN	8	10	8	5	7.75
Pre-Fire	8	PRUVUL	1	2	6	2	2.75
Pre-Fire	8	CENERY	1	0	1	0	0.5
Pre-Fire	8	Carex sp.	1	2	1	1	1.25
Pre-Fire	8	TAECAP	1	0	0	1	0.5
Pre-Fire	8	ELYGLA	5	3	2	2	3
Pre-Fire	8	BROHOR	2	2	0	4	2
Pre-Fire	8	ERILAN	1	0	1	3	1.25
Pre-Fire	8	MYODIS	1	0	0	0	0.25
Pre-Fire	8	VULBRO	1	1	1	2	1.25
Pre-Fire	8	SHEARV	1	0	1	0	0.5
Pre-Fire	8	GALPAR	1	1	0	1	0.75
Pre-Fire	8	VICSAT	1	1	0	0	0.5
Pre-Fire	8	BROCOM	3	5	5	3	4
Pre-Fire	8	HYPRAD	0	1	0	0	0.25
Pre-Fire	8	Clarkia	0	0	1	0	0.25
Pre-Fire	8	BRODIA	0	0	1	0	0.25
Pre-Fire	8	TORARV	0	0	0	1	0.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	9	Bare Ground	0	2	3	15	5
Pre-Fire	9	Moss	0	0	0	0	0
Pre-Fire	9	Thatch	90	75	30	50	61.25
Pre-Fire	9	Rock	0	0	0	0	0
Pre-Fire	9	TOXDIV	2	4	2	0	2
Pre-Fire	9	DAUCAR	1	0	1	0	0.5
Pre-Fire	9	LEUVUL	7	5	35	5	13
Pre-Fire	9	SANBIP	1	0	0	0	0.25
Pre-Fire	9	VICSAT	6	2	1	2	2.75
Pre-Fire	9	VICHIR	2	2	3	4	2.75
Pre-Fire	9	CYNECH	1	0	1	1	0.75
Pre-Fire	9	TORARV	2	0	1	2	1.25
Pre-Fire	9	BROSIT	5	8	10	7	7.5
Pre-Fire	9	ELYGLA	0	4	20	3	6.75
Pre-Fire	9	MADGLO	0	0	1	0	0.25
Pre-Fire	9	QUEGAR	0	0	0	35	8.75
Pre-Fire	10	Bare Ground	15	0	0	0	3.75
Pre-Fire	10	Moss	0	0	0	0	0
Pre-Fire	10	Thatch	60	40	40	45	46.25
Pre-Fire	10	Rock	0	0	0	0	0
Pre-Fire	10	DACGLO	20	15	15	8	14.5
Pre-Fire	10	LEUVUL	20	15	25	15	18.75
Pre-Fire	10	Madia sp.	6	0	3	4	3.25
Pre-Fire	10	DAUCAR	2	1	3	1	1.75
Pre-Fire	10	SCHARU	75	55	50	55	58.75
Pre-Fire	10	BROSIT	5	2	3	0	2.5
Pre-Fire	10	CENERY	1	0	0	0	0.25
Pre-Fire	10	SONASP	1	0	3	3	1.75
Pre-Fire	10	VICHIR	1	1	2	3	1.75
Pre-Fire	10	SHEARV	1	0	3	3	1.75
Pre-Fire	10	MYODIS	1	0	1	0	0.5
Pre-Fire	10	HYPRAD	2	0	0	1	0.75
Pre-Fire	10	HYPPER	1	1	0	0	0.5
Pre-Fire	10	MADGLO	0	1	0	2	0.75
Pre-Fire	10	BRODIA	0	1	0	3	1
Pre-Fire	10	GALPAR	0	0	3	3	1.5
Pre-Fire	10	AVESAT	0	0	2	1	0.75
Pre-Fire	10	LINBIE	0	0	1	1	0.5
Pre-Fire	10	TAECAP	0	0	0	1	0.25
Pre-Fire	10	VICSAT	0	0	0	1	0.25
Pre-Fire	10	VULBRO	0	0	0	1	0.25
Pre-Fire	10	CERNUT	0	0	0	1	0.25
Pre-Fire	11	Bare Ground	2	4	4	2	3
Pre-Fire	11	Moss	0	0	0	0	0

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	11	Thatch	70	35	15	25	36.25
Pre-Fire	11	Rock	0	0	0	0	0
Pre-Fire	11	SCHARU	35	45	40	55	43.75
Pre-Fire	11	Woody Debris	7	0	5	8	5
Pre-Fire	11	TORARV	6	10	15	5	9
Pre-Fire	11	LEUVUL	8	3	15	15	10.25
Pre-Fire	11	POASEC	1	2	3	0	1.5
Pre-Fire	11	GERDIS	1	3	2	2	2
Pre-Fire	11	SHEARV	2	2	0	2	1.5
Pre-Fire	11	CERNUT	1	0	1	1	0.75
Pre-Fire	11	ECHCRU	1	0	0	0	0.25
Pre-Fire	11	DACGLO	5	5	4	0	3.5
Pre-Fire	11	HOLLAN	1	0	0	0	0.25
Pre-Fire	11	VICSAT	2	4	4	3	3.25
Pre-Fire	11	ELYGLA	0	1	3	0	1
Pre-Fire	11	HYPPER	0	1	0	0	0.25
Pre-Fire	11	BROSIT	0	1	0	0	0.25
Pre-Fire	11	CYNECH	2	3	2	2	2.25
Pre-Fire	11	POTGRA	0	1	0	0	0.25
Pre-Fire	11	VULBRO	0	1	0	0	0.25
Pre-Fire	11	ERILAN	0	0	1	0	0.25
Pre-Fire	11	ACHMIL	0	0	1	1	0.5
Pre-Fire	11	FRAVIR	0	0	1	2	0.75
Pre-Fire	11	MYODIS	0	0	1	0	0.25
Pre-Fire	11	CIRARV	1	0	0	4	1.25
Pre-Fire	11	BROCOR	0	0	0	1	0.25
Pre-Fire	12	Bare Ground	0	2	3	0	1.25
Pre-Fire	12	Moss	0	0	0	0	0
Pre-Fire	12	Thatch	20	15	20	15	17.5
Pre-Fire	12	Rock	0	0	0	0	0
Pre-Fire	12	RUBURS	5	7	0	3	3.75
Pre-Fire	12	LEUVUL	65	55	50	70	60
Pre-Fire	12	DAUCAR	1	0	3	1	1.25
Pre-Fire	12	BROCOR	1	0	0	0	0.25
Pre-Fire	12	TORARV	4	5	5	9	5.75
Pre-Fire	12	POASEC	1	0	0	2	0.75
Pre-Fire	12	HOLLAN	1	4	4	10	4.75
Pre-Fire	12	SCHARU	55	45	45	45	47.5
Pre-Fire	12	BROSIT	0	1	3	0	1
Pre-Fire	12	CIRARV	0	1	1	0	0.5
Pre-Fire	12	GERDIS	0	1	2	4	1.75
Pre-Fire	12	VICSAT	0	1	0	1	0.5
Pre-Fire	12	Woody Debris	0	10	0	0	2.5
Pre-Fire	12	DACGLO	0	0	1	3	1

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	12	MYODIS	0	0	1	0	0.25
Pre-Fire	12	FRAVIR	0	0	0	1	0.25
Pre-Fire	12	CERNUT	0	0	0	1	0.25
Pre-Fire	13	Bare Ground	10	4	2	5	5.25
Pre-Fire	13	Moss	0	1	0	0	0.25
Pre-Fire	13	Thatch	10	20	40	15	21.25
Pre-Fire	13	Rock	0	0	0	0	0
Pre-Fire	13	LEUVUL	30	15	25	20	22.5
Pre-Fire	13	Sidalcea sp.	2	0	0	5	1.75
Pre-Fire	13	FRAVIR	3	25	3	5	9
Pre-Fire	13	POTGRA	3	0	0	0	0.75
Pre-Fire	13	CERNUT	1	1	1	1	1
Pre-Fire	13	CIRVUL	1	0	0	0	0.25
Pre-Fire	13	LOTDEN	1	1	1	1	1
Pre-Fire	13	TORARV	3	1	0	1	1.25
Pre-Fire	13	ELYGLA	5	1	8	10	6
Pre-Fire	13	SCHARU	10	20	15	8	13.25
Pre-Fire	13	CLAPUR	1	0	0	0	0.25
Pre-Fire	13	PLALAN	1	1	10	3	3.75
Pre-Fire	13	MYODIS	1	1	0	0	0.5
Pre-Fire	13	AIRCAR	1	1	1	1	1
Pre-Fire	13	BROCOM	3	0	4	3	2.5
Pre-Fire	13	CALTOL	1	0	0	1	0.5
Pre-Fire	13	Carex sp.	0	1	0	0	0.25
Pre-Fire	13	BROCOR	0	1	0	1	0.5
Pre-Fire	13	CLAAMO	0	1	1	0	0.5
Pre-Fire	13	GALPAR	0	1	1	0	0.5
Pre-Fire	13	FESROE	10	25	15	4	13.5
Pre-Fire	13	DANCAL	0	0	0	5	1.25
Pre-Fire	13	CARTUM	0	0	5	3	2
Pre-Fire	13	VICSAT	0	0	1	0	0.25
Pre-Fire	13	HEIALB	0	0	0	1	0.25
Pre-Fire	13	HYPRAD	0	0	0	1	0.25
Pre-Fire	14	Bare Ground	0	5	2	4	2.75
Pre-Fire	14	Moss	0	0	0	0	0
Pre-Fire	14	Thatch	70	45	45	30	47.5
Pre-Fire	14	Rock	0	0	0	0	0
Pre-Fire	14	ARRELA	35	20	65	55	43.75
Pre-Fire	14	LEUVUL	4	5	3	0	3
Pre-Fire	14	ELYGLA	5	5	3	7	5
Pre-Fire	14	FESROE	30	10	0	0	10
Pre-Fire	14	TORARV	1	3	5	6	3.75
Pre-Fire	14	CRAMON	1	0	0	0	0.25
Pre-Fire	14	CARTUM	10	0	1	0	2.75

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	14	BROCOR	1	0	0	1	0.5
Pre-Fire	14	AIRCAR	1	0	0	0	0.25
Pre-Fire	14	FRAVIR	4	4	1	5	3.5
Pre-Fire	14	TOXDIV	0	25	3	2	7.5
Pre-Fire	14	VULBRO	0	1	0	0	0.25
Pre-Fire	14	CERNUT	0	1	0	3	1
Pre-Fire	14	SHEARV	0	1	0	0	0.25
Pre-Fire	14	PLALAN	2	1	0	0	0.75
Pre-Fire	14	POASEC	0	1	0	0	0.25
Pre-Fire	14	DANCAL	0	0	3	0	0.75
Pre-Fire	14	DACGLO	0	0	5	5	2.5
Pre-Fire	14	GERDIS	0	0	3	2	1.25
Pre-Fire	14	POTGRA	0	0	0	4	1
Pre-Fire	14	MYODIS	0	0	0	1	0.25
Pre-Fire	15	Bare Ground	7	5	0	3	3.75
Pre-Fire	15	Moss	0	1	3	5	2.25
Pre-Fire	15	Thatch	10	5	30	10	13.75
Pre-Fire	15	Rock	0	0	0	0	0
Pre-Fire	15	LEUVUL	35	40	25	30	32.5
Pre-Fire	15	ARRELA	15	5	10	5	8.75
Pre-Fire	15	FRAVIR	30	40	45	25	35
Pre-Fire	15	FESROE	2	5	35	3	11.25
Pre-Fire	15	DAUCAR	3	5	7	3	4.5
Pre-Fire	15	BROHOR	4	3	4	3	3.5
Pre-Fire	15	VULBRO	4	1	1	3	2.25
Pre-Fire	15	TORARV	3	4	4	3	3.5
Pre-Fire	15	CYNECH	2	0	0	0	0.5
Pre-Fire	15	AIRCAR	1	1	0	2	1
Pre-Fire	15	Carex sp.	1	0	0	1	0.5
Pre-Fire	15	PLALAN	1	0	2	2	1.25
Pre-Fire	15	CERNUT	1	0	0	0	0.25
Pre-Fire	15	HYPRAD	3	0	0	2	1.25
Pre-Fire	15	MYODIS	1	0	0	0	0.25
Pre-Fire	15	MADGLO	1	1	0	0	0.5
Pre-Fire	15	ECHCRU	1	0	0	0	0.25
Pre-Fire	15	EPICIL	1	0	0	0	0.25
Pre-Fire	15	ROSNUT	1	0	0	0	0.25
Pre-Fire	15	VICSAT	1	2	1	2	1.5
Pre-Fire	15	ELYGLA	1	5	10	7	5.75
Pre-Fire	15	CARTUM	0	3	0	0	0.75
Pre-Fire	15	GERDIS	0	0	0	2	0.5
Pre-Fire	15	POTGRA	0	5	0	2	1.75
Pre-Fire	15	CENERY	0	1	0	0	0.25
Pre-Fire	15	BROCOM	0	2	0	0	0.5

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	15	ROSNUT	0	1	0	0	0.25
Pre-Fire	15	PRUVUL	0	0	1	0	0.25
Pre-Fire	15	ACHMIL	0	0	1	0	0.25
Pre-Fire	15	POASEC	0	0	1	1	0.5
Pre-Fire	15	GALPAR	0	0	0	1	0.25
Pre-Fire	15	CIRVUL	0	0	0	2	0.5
Pre-Fire	15	ERILAN	0	0	0	4	1
Pre-Fire	16	Bare Ground	0	0	4	1	1.25
Pre-Fire	16	Moss	2	5	8	0	3.75
Pre-Fire	16	Thatch	15	20	25	20	20
Pre-Fire	16	Rock	0	0	0	0	0
Pre-Fire	16	ELYGLA	8	9	8	8	8.25
Pre-Fire	16	LEUVUL	30	30	20	15	23.75
Pre-Fire	16	HYPRAD	2	0	1	0	0.75
Pre-Fire	16	DANCAL	1	2	1	1	1.25
Pre-Fire	16	FRAVIR	40	15	15	20	22.5
Pre-Fire	16	ARRELA	35	30	50	30	36.25
Pre-Fire	16	CARTUM	5	2	1	2	2.5
Pre-Fire	16	CALTOL	2	0	1	1	1
Pre-Fire	16	PLALAN	4	6	3	3	4
Pre-Fire	16	BROCOM	15	8	3	2	7
Pre-Fire	16	MADGLO	1	0	1	1	0.75
Pre-Fire	16	ACHMIL	1	2	1	2	1.5
Pre-Fire	16	TORARV	2	1	1	2	1.5
Pre-Fire	16	LOTDEN	1	0	0	0	0.25
Pre-Fire	16	CLAPUR	0	1	2	0	0.75
Pre-Fire	16	Carex sp.	0	2	0	0	0.5
Pre-Fire	16	BROSIT	0	3	0	1	1
Pre-Fire	16	POASEC	0	1	1	1	0.75
Pre-Fire	16	AIRCAR	0	0	1	0	0.25
Pre-Fire	16	HOLLAN	0	0	1	0	0.25
Pre-Fire	16	POTGRA	0	0	0	2	0.5
Pre-Fire	16	BROCOR	0	0	0	1	0.25
Pre-Fire	17	Bare Ground	1	1	0	1	0.75
Pre-Fire	17	Moss	3	0	0	5	2
Pre-Fire	17	Thatch	30	20	25	35	27.5
Pre-Fire	17	Rock	0	0	0	0	0
Pre-Fire	17	ARRELA	5	5	0	5	3.75
Pre-Fire	17	LEUVUL	15	10	15	30	17.5
Pre-Fire	17	FRAVIR	20	4	7	20	12.75
Pre-Fire	17	SCHARU	45	80	40	30	48.75
Pre-Fire	17	LOTDEN	2	1	2	1	1.5
Pre-Fire	17	VICHIR	1	1	1	1	1
Pre-Fire	17	PRUVUL	2	0	0	3	1.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Pre-Fire	17	BROHOR	1	1	0	0	0.5
Pre-Fire	17	ELYGLA	5	0	2	5	3
Pre-Fire	17	VICSAT	1	0	0	0	0.25
Pre-Fire	17	BROCOM	3	3	5	0	2.75
Pre-Fire	17	Carex sp.	0	1	0	2	0.75
Pre-Fire	17	POASEC	1	1	1	1	1
Pre-Fire	17	HOLLAN	1	0	0	2	0.75
Pre-Fire	17	ROSNUT	0	1	0	0	0.25
Pre-Fire	17	CARTUM	0	5	3	0	2
Pre-Fire	17	DAUCAR	0	0	1	4	1.25
Pre-Fire	17	ACHMIL	0	0	1	2	0.75
Pre-Fire	17	DANCAL	0	0	0	1	0.25
Pre-Fire	18	Bare Ground	4	3	3	0	2.5
Pre-Fire	18	Moss	0	0	0	0	0
Pre-Fire	18	Thatch	30	40	35	25	32.5
Pre-Fire	18	Rock	0	0	0	0	0
Pre-Fire	18	CYNECH	55	30	20	35	35
Pre-Fire	18	ARRELA	20	20	15	35	22.5
Pre-Fire	18	DAUCAR	5	6	3	4	4.5
Pre-Fire	18	PTEAQU	3	4	4	8	4.75
Pre-Fire	18	HYPRAD	2	2	6	4	3.5
Pre-Fire	18	PLALAN	1	2	1	0	1
Pre-Fire	18	VULBRO	1	0	0	0	0.25
Pre-Fire	18	LEUVUL	6	5	10	5	6.5
Pre-Fire	18	BROCOR	2	2	1	0	1.25
Pre-Fire	18	BROCOM	15	15	10	10	12.5
Pre-Fire	18	TORARV	5	1	0	0	1.5
Pre-Fire	18	ELYGLA	2	0	0	0	0.5
Pre-Fire	18	BROHOR	1	3	5	0	2.25
Pre-Fire	18	RUBBIF	0	1	2	1	1
Pre-Fire	18	ERILAN	0	1	2	0	0.75
Pre-Fire	18	GERDIS	0	1	0	0	0.25
Pre-Fire	18	Woody Debris	0	0	7	10	4.25
Pre-Fire	18	LINBIE	0	0	3	2	1.25
Pre-Fire	18	DANCAL	0	0	1	2	0.75
Pre-Fire	18	PRUVUL	0	0	3	2	1.25
Pre-Fire	18	Carex sp.	0	0	1	0	0.25
Pre-Fire	18	CLAPUR	0	0	1	0	0.25
Pre-Fire	18	GALPAR	0	0	1	0	0.25
Pre-Fire	18	FRAVIR	0	0	2	2	1
Pre-Fire	18	VICSAT	0	0	1	1	0.5
Pre-Fire	18	AIRCAR	0	0	1	0	0.25
Pre-Fire	18	BRODIA	0	0	0	1	0.25
Pre-Fire	18	DACGLO	0	0	0	2	0.5

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	1	Bare Ground	20	25	30	30	26.25
Post-Fire	1	Moss	0	0	0	0	0
Post-Fire	1	Thatch	0	1	1	1	0.75
Post-Fire	1	Rock	1	2	1	0	1
Post-Fire	1	TAECAP	10	5	5	5	6.25
Post-Fire	1	DANCAL	2	0	0	0	0.5
Post-Fire	1	PRUVUL	5	5	5	5	5
Post-Fire	1	ELYGLA	2	0	3	1	1.5
Post-Fire	1	PLECON	10	15	15	15	13.75
Post-Fire	1	DAUCAR	1	5	2	3	2.75
Post-Fire	1	LINBIE	15	10	5	5	8.75
Post-Fire	1	PLALAN	1	0	0	0	0.25
Post-Fire	1	AIRCAR	1	2	1	1	1.25
Post-Fire	1	LOTMIC	2	5	5	5	4.25
Post-Fire	1	BROHOR	1	3	1	1	1.5
Post-Fire	1	MADGLO	2	2	1	0	1.25
Post-Fire	1	VICSAT	1	1	2	2	1.5
Post-Fire	1	VICHIR	1	3	2	1	1.75
Post-Fire	1	VENDUB	1	2	1	3	1.75
Post-Fire	1	VULBRO	1	3	1	1	1.5
Post-Fire	1	GALPAR	1	1	0	1	0.75
Post-Fire	1	LOTDEN	1	1	1	0	0.75
Post-Fire	1	GERDIS	1	1	0	0	0.5
Post-Fire	1	AGRSTO	1	0	0	2	0.75
Post-Fire	1	HYPRAD	1	2	0	2	1.25
Post-Fire	1	BRODIA	1	1	0	0	0.5
Post-Fire	1	ARRELA	0	1	1	2	1
Post-Fire	1	LEUVUL	0	1	1	1	0.75
Post-Fire	1	CYNECH	4	4	1	3	3
Post-Fire	1	FRAVIR	0	0	0	1	0.25
Post-Fire	2	Bare Ground	4	10	5	2	5.25
Post-Fire	2	Moss	0	0	0	0	0
Post-Fire	2	Thatch	10	4	5	5	6
Post-Fire	2	Rock	1	0	1	0	0.5
Post-Fire	2	CYNECH	10	10	10	25	13.75
Post-Fire	2	DACGLO	3	0	0	5	2
Post-Fire	2	ACHMIL	10	5	3	2	5
Post-Fire	2	GERDIS	1	2	1	1	1.25
Post-Fire	2	LEUVUL	1	10	10	15	9
Post-Fire	2	DAUCAR	10	3	3	2	4.5
Post-Fire	2	SCHARU	15	5	15	10	11.25
Post-Fire	2	BRODIA	4	15	1	1	5.25
Post-Fire	2	HYPRAD	4	1	1	5	2.75
Post-Fire	2	ELYGLA	2	0	0	1	0.75

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	2	PLALAN	3	0	0	0	0.75
Post-Fire	2	AGRSTO	3	5	1	5	3.5
Post-Fire	2	VICSAT	1	1	1	1	1
Post-Fire	2	LINBIE	1	3	2	1	1.75
Post-Fire	2	FRAVIR	3	5	3	1	3
Post-Fire	2	BROCOR	1	0	0	0	0.25
Post-Fire	2	VICHIR	2	1	0	1	1
Post-Fire	2	MADGLO	1	1	0	1	0.75
Post-Fire	2	BROSIT	2	1	1	1	1.25
Post-Fire	2	LOTDEN	1	1	1	1	1
Post-Fire	2	TORARV	1	1	1	0	0.75
Post-Fire	2	MYODIS	1	1	0	0	0.5
Post-Fire	2	BROHOR	2	2	1	2	1.75
Post-Fire	2	Lathyrus sp.	1	0	1	1	0.75
Post-Fire	2	GALPAR	0	1	0	0	0.25
Post-Fire	2	CERNUT	0	1	1	0	0.5
Post-Fire	2	ROSNUT	0	1	0	0	0.25
Post-Fire	2	PRUVUL	0	0	1	0	0.25
Post-Fire	2	CARDEN	0	0	1	0	0.25
Post-Fire	2	VULBRO	0	0	0	1	0.25
Post-Fire	3	Bare Ground	5	5	10	15	8.75
Post-Fire	3	Moss	0	0	0	0	0
Post-Fire	3	Thatch	5	10	3	0	4.5
Post-Fire	3	Rock	1	0	0	1	0.5
Post-Fire	3	SCHARU	45	40	35	40	40
Post-Fire	3	DACGLO	10	5	5	5	6.25
Post-Fire	3	BROSIT	3	1	1	0	1.25
Post-Fire	3	PLALAN	1	2	2	0	1.25
Post-Fire	3	LEUVUL	15	5	3	5	7
Post-Fire	3	LINBIE	1	1	1	1	1
Post-Fire	3	GERDIS	1	1	1	1	1
Post-Fire	3	DAUCAR	3	5	2	2	3
Post-Fire	3	ACHMIL	3	5	1	0	2.25
Post-Fire	3	ERILAN	3	1	3	1	2
Post-Fire	3	FRAVIR	2	0	10	0	3
Post-Fire	3	VICSAT	1	1	0	1	0.75
Post-Fire	3	CYNECH	2	1	0	0	0.75
Post-Fire	3	MYODIS	1	1	1	1	1
Post-Fire	3	VICHIR	1	1	1	1	1
Post-Fire	3	VENDUB	2	0	1	1	1
Post-Fire	3	PTEAQU	0	3	0	0	0.75
Post-Fire	3	BROCOR	0	1	0	0	0.25
Post-Fire	3	TORARV	0	1	1	1	0.75
Post-Fire	3	POASEC	0	1	0	1	0.5

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	3	HYPRAD	0	3	0	3	1.5
Post-Fire	3	BROHOR	0	1	1	1	0.75
Post-Fire	3	VULBRO	0	1	2	1	1
Post-Fire	3	PRUVUL	0	1	0	0	0.25
Post-Fire	3	MADGLO	0	0	1	0	0.25
Post-Fire	3	TRIHYA	0	1	0	0	0.25
Post-Fire	3	ELYGLA	0	0	1	0	0.25
Post-Fire	3	GALPAR	0	0	1	1	0.5
Post-Fire	3	Lathyrus sp.	0	0	1	1	0.5
Post-Fire	3	AIRCAR	0	0	0	1	0.25
Post-Fire	3	CARDEN	0	0	0	1	0.25
Post-Fire	4	Bare Ground	15	40	15	10	20
Post-Fire	4	Moss	0	0	0	3	0.75
Post-Fire	4	Thatch	1	3	5	1	2.5
Post-Fire	4	Rock	0	1	0	1	0.5
Post-Fire	4	CYNECH	25	15	25	35	25
Post-Fire	4	DACGLO	5	3	4	0	3
Post-Fire	4	PRUVUL	3	0	3	3	2.25
Post-Fire	4	HYPRAD	3	1	4	1	2.25
Post-Fire	4	FRAVIR	5	5	5	3	4.5
Post-Fire	4	ERILAN	5	15	4	2	6.5
Post-Fire	4	EPICIL	1	1	3	1	1.5
Post-Fire	4	GERDIS	1	2	2	1	1.5
Post-Fire	4	TORARV	1	1	1	1	1
Post-Fire	4	CERNUT	1	1	0	0	0.5
Post-Fire	4	DAUCAR	3	3	3	4	3.25
Post-Fire	4	ACHMIL	10	5	15	10	10
Post-Fire	4	HYPPER	1	2	0	1	1
Post-Fire	4	FESRUB	3	0	0	1	1
Post-Fire	4	POASEC	1	1	0	0	0.5
Post-Fire	4	ELYREP	2	2	0	2	1.5
Post-Fire	4	AIRCAR	3	2	1	2	2
Post-Fire	4	BROHOR	1	1	1	1	1
Post-Fire	4	CARDEN	1	2	1	1	1.25
Post-Fire	4	GALPAR	2	2	0	0	1
Post-Fire	4	LOTMIC	2	3	3	5	3.25
Post-Fire	4	BROSIT	2	1	3	3	2.25
Post-Fire	4	Madia sp.	2	0	0	5	1.75
Post-Fire	4	SCHARU	3	0	0	5	2
Post-Fire	4	AGRSTO	2	1	0	1	1
Post-Fire	4	VERARV	1	1	0	0	0.5
Post-Fire	4	ARRELA	0	3	2	2	1.75
Post-Fire	4	BROINE	0	1	0	0	0.25
Post-Fire	4	Lathyrus sp.	0	1	1	1	0.75

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	4	HOLLAN	0	1	0	0	0.25
Post-Fire	4	LEUVUL	3	5	5	5	4.5
Post-Fire	4	CRESET	0	1	0	0	0.25
Post-Fire	4	ELYGLA	0	1	3	0	1
Post-Fire	4	DANCAL	0	0	1	5	1.5
Post-Fire	4	FESROE	0	0	3	3	1.5
Post-Fire	4	BROCOR	0	0	0	1	0.25
Post-Fire	5	Bare Ground	20	40	20	35	28.75
Post-Fire	5	Moss	15	5	5	2	6.75
Post-Fire	5	Thatch	0	1	0	0	0.25
Post-Fire	5	Rock	10	10	5	10	8.75
Post-Fire	5	PLALAN	3	5	3	5	4
Post-Fire	5	TAECAP	5	3	10	5	5.75
Post-Fire	5	CYNECH	3	2	5	5	3.75
Post-Fire	5	DAUCAR	2	4	3	3	3
Post-Fire	5	PRUVUL	2	2	1	1	1.5
Post-Fire	5	FRAVIR	2	0	1	0	0.75
Post-Fire	5	AIRCAR	2	3	3	3	2.75
Post-Fire	5	GALPAR	1	1	4	5	2.75
Post-Fire	5	VICHIR	1	1	1	1	1
Post-Fire	5	VENDUB	5	10	10	5	7.5
Post-Fire	5	VICSAT	1	1	1	1	1
Post-Fire	5	LOTMIC	1	0	0	1	0.5
Post-Fire	5	BROHOR	4	4	3	4	3.75
Post-Fire	5	VULBRO	1	1	3	3	2
Post-Fire	5	CLAPUR	1	0	2	1	1
Post-Fire	5	LINBIE	2	3	4	4	3.25
Post-Fire	5	EPICIL	1	0	1	1	0.75
Post-Fire	5	DACGLO	0	0	1	0	0.25
Post-Fire	5	FESROE	4	0	0	3	1.75
Post-Fire	5	BRODIA	3	1	0	0	1
Post-Fire	5	TRIDUB	0	1	1	0	0.5
Post-Fire	5	ERILAN	0	1	5	4	2.5
Post-Fire	5	KOEMAC	0	2	0	5	1.75
Post-Fire	5	Lupinus sp.	0	1	1	0	0.5
Post-Fire	5	Lathyrus sp.	0	1	1	1	0.75
Post-Fire	5	MADGLO	0	0	1	0	0.25
Post-Fire	5	HYPRAD	0	0	0	1	0.25
Post-Fire	5	DANCAL	0	0	0	1	0.25
Post-Fire	5	MYODIS	0	0	0	1	0.25
Post-Fire	6	Bare Ground	15	10	10	25	15
Post-Fire	6	Moss	0	5	0	0	1.25
Post-Fire	6	Thatch	3	1	3	2	2.25
Post-Fire	6	Rock	1	1	1	1	1

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	6	FRAVIR	30	45	35	30	35
Post-Fire	6	AIRCAR	5	5	5	10	6.25
Post-Fire	6	PRUVUL	5	0	0	2	1.75
Post-Fire	6	CALTOL	4	1	1	2	2
Post-Fire	6	CLAPUR	1	1	0	0	0.5
Post-Fire	6	CYNECH	2	0	1	1	1
Post-Fire	6	PLALAN	4	10	10	10	8.5
Post-Fire	6	FESROE	2	5	5	15	6.75
Post-Fire	6	FESRUB	2	0	0	0	0.5
Post-Fire	6	DELMEN	1	0	0	0	0.25
Post-Fire	6	BROCOR	1	0	0	0	0.25
Post-Fire	6	KOEMAC	5	5	0	2	3
Post-Fire	6	VICSAT	1	1	1	1	1
Post-Fire	6	BROSIT	1	0	0	0	0.25
Post-Fire	6	VULBRO	4	5	2	3	3.5
Post-Fire	6	EPICIL	1	1	1	1	1
Post-Fire	6	HYPPER	1	5	1	5	3
Post-Fire	6	ELYGLA	3	1	0	0	1
Post-Fire	6	GERDIS	1	1	1	1	1
Post-Fire	6	CERNUT	1	1	1	1	1
Post-Fire	6	GALPAR	1	1	1	1	1
Post-Fire	6	LEUVUL	1	5	5	1	3
Post-Fire	6	CARDEN	0	3	1	1	1.25
Post-Fire	6	TRIDUB	0	1	0	0	0.25
Post-Fire	6	CARTUM	0	5	0	1	1.5
Post-Fire	6	CENERY	0	0	1	0	0.25
Post-Fire	6	ELYREP	10	0	5	5	5
Post-Fire	6	Lathyrus sp.	0	0	0	1	0.25
Post-Fire	7	Bare Ground	2	5	5	5	4.25
Post-Fire	7	Moss	0	0	0	0	0
Post-Fire	7	Thatch	3	5	2	25	8.75
Post-Fire	7	Rock	0	0	1	1	0.5
Post-Fire	7	TORARV	3	2	3	3	2.75
Post-Fire	7	SCHARU	10	15	15	35	18.75
Post-Fire	7	AVESAT	5	5	0	3	3.25
Post-Fire	7	SIDMAL	5	5	3	1	3.5
Post-Fire	7	LINBIE	5	3	4	10	5.5
Post-Fire	7	DAUCAR	5	10	5	5	6.25
Post-Fire	7	AIRCAR	3	0	0	0	0.75
Post-Fire	7	BROCOR	1	0	0	0	0.25
Post-Fire	7	CYNECH	3	5	10	3	5.25
Post-Fire	7	MADGLO	1	1	0	0	0.5
Post-Fire	7	GALPAR	4	1	2	5	3
Post-Fire	7	FRAVIR	5	0	0	0	1.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	7	LEUVUL	10	10	5	20	11.25
Post-Fire	7	MARORE	5	0	10	10	6.25
Post-Fire	7	CARTUM	5	5	10	5	6.25
Post-Fire	7	CERNUT	1	2	2	2	1.75
Post-Fire	7	GERDIS	2	4	3	2	2.75
Post-Fire	7	MYODIS	1	1	1	1	1
Post-Fire	7	VENDUB	2	2	2	2	2
Post-Fire	7	VULBRO	3	2	3	1	2.25
Post-Fire	7	VERARV	1	1	1	1	1
Post-Fire	7	SONASP	2	2	1	1	1.5
Post-Fire	7	ELYREP	1	1	1	3	1.5
Post-Fire	7	DACGLO	3	0	5	2	2.5
Post-Fire	7	BROHOR	1	2	2	0	1.25
Post-Fire	7	BRODIA	0	2	0	0	0.5
Post-Fire	7	EPICIL	0	1	0	0	0.25
Post-Fire	7	SHEARV	0	2	1	1	1
Post-Fire	7	HYPRAD	0	3	2	0	1.25
Post-Fire	7	HYPPER	0	0	0	1	0.25
Post-Fire	7	PRUVUL	0	0	0	1	0.25
Post-Fire	7	PTEAQU	0	0	0	3	0.75
Post-Fire	7	DICCON	0	0	1	0	0.25
Post-Fire	7	CIRVUL	0	0	2	0	0.5
Post-Fire	7	POASEC	0	0	1	1	0.5
Post-Fire	7	ELYGLA	0	0	1	2	0.75
Post-Fire	8	Bare Ground	10	5	3	10	7
Post-Fire	8	Moss	0	0	0	0	0
Post-Fire	8	Thatch	3	2	2	5	3
Post-Fire	8	Rock	0	0	0	0	0
Post-Fire	8	FESROE	10	10	10	3	8.25
Post-Fire	8	ARRELA	10	5	5	5	6.25
Post-Fire	8	FRAVIR	10	20	40	25	23.75
Post-Fire	8	ACHMIL	2	2	3	2	2.25
Post-Fire	8	CYNECH	5	3	15	5	7
Post-Fire	8	PRUVUL	1	5	1	1	2
Post-Fire	8	HYPRAD	2	0	0	0	0.5
Post-Fire	8	AIRCAR	2	2	4	4	3
Post-Fire	8	BROSIT	5	5	5	3	4.5
Post-Fire	8	BROHOR	3	3	2	2	2.5
Post-Fire	8	BROCOR	1	0	1	1	0.75
Post-Fire	8	PLALAN	5	3	5	1	3.5
Post-Fire	8	VICSAT	1	1	1	3	1.5
Post-Fire	8	CARDEN	1	1	2	1	1.25
Post-Fire	8	DACGLO	3	1	3	0	1.75
Post-Fire	8	ERILAN	3	1	3	4	2.75

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	8	POTGRA	3	1	3	2	2.25
Post-Fire	8	LINBIE	1	1	1	1	1
Post-Fire	8	MYODIS	1	0	0	0	0.25
Post-Fire	8	DANCAL	2	2	3	3	2.5
Post-Fire	8	CRAMON	0	2	0	0	0.5
Post-Fire	8	CENERY	0	2	0	0	0.5
Post-Fire	8	VULBRO	0	1	3	3	1.75
Post-Fire	8	Lotus sp.	0	1	0	0	0.25
Post-Fire	8	LEUVUL	0	2	0	2	1
Post-Fire	8	MADGLO	0	0	1	0	0.25
Post-Fire	8	POASEC	0	1	0	0	0.25
Post-Fire	8	DAUCAR	0	0	2	2	1
Post-Fire	8	SCHARU	0	0	0	5	1.25
Post-Fire	8	LOLPER	0	0	0	3	0.75
Post-Fire	9	Bare Ground	5	5	10	10	7.5
Post-Fire	9	Moss	0	0	0	0	0
Post-Fire	9	Thatch	15	40	15	15	21.25
Post-Fire	9	Rock	0	0	0	0	0
Post-Fire	9	ELYGLA	5	3	5	0	3.25
Post-Fire	9	DAUCAR	5	4	2	5	4
Post-Fire	9	PRUVUL	1	4	0	3	2
Post-Fire	9	LEUVUL	5	5	15	10	8.75
Post-Fire	9	ACHMIL	5	5	3	5	4.5
Post-Fire	9	PLALAN	5	5	3	2	3.75
Post-Fire	9	FRAVIR	10	4	1	10	6.25
Post-Fire	9	LINBIE	2	2	1	1	1.5
Post-Fire	9	ERILAN	5	5	3	5	4.5
Post-Fire	9	DACGLO	5	2	0	0	1.75
Post-Fire	9	BROHOR	2	2	5	2	2.75
Post-Fire	9	PTEAQU	5	0	0	3	2
Post-Fire	9	VICSAT	1	2	2	1	1.5
Post-Fire	9	HYPRAD	3	2	10	5	5
Post-Fire	9	CYNECH	2	4	10	5	5.25
Post-Fire	9	CARDEN	1	1	0	1	0.75
Post-Fire	9	BROSIT	5	5	10	5	6.25
Post-Fire	9	SCHARU	5	10	3	5	5.75
Post-Fire	9	HYPPER	1	1	1	0	0.75
Post-Fire	9	MADGLO	1	1	1	1	1
Post-Fire	9	GERDIS	1	1	0	0	0.5
Post-Fire	9	VULBRO	1	1	0	1	0.75
Post-Fire	9	QUEGAR	2	0	0	0	0.5
Post-Fire	9	POASEC	1	0	0	0	0.25
Post-Fire	9	KOEMAC	0	2	0	0	0.5
Post-Fire	9	MYODIS	0	1	1	1	0.75

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	9	VICHIR	0	1	1	4	1.5
Post-Fire	9	CERNUT	0	0	1	0	0.25
Post-Fire	9	LOTMIC	0	0	2	0	0.5
Post-Fire	9	AGRSTO	0	0	1	0	0.25
Post-Fire	9	TORARV	0	0	1	0	0.25
Post-Fire	9	GALPAR	0	0	1	1	0.5
Post-Fire	10	Bare Ground	15	10	15	15	13.75
Post-Fire	10	Moss	0	0	0	0	0
Post-Fire	10	Thatch	10	10	5	10	8.75
Post-Fire	10	Rock	1	1	3	0	1.25
Post-Fire	10	ARRELA	20	25	30	35	27.5
Post-Fire	10	SCHARU	25	25	30	35	28.75
Post-Fire	10	LEUVUL	10	5	10	3	7
Post-Fire	10	ELYGLA	5	2	2	1	2.5
Post-Fire	10	LINBIE	3	1	1	2	1.75
Post-Fire	10	BROHOR	1	2	0	1	1
Post-Fire	10	GALPAR	1	1	1	0	0.75
Post-Fire	10	VICHIR	2	3	5	5	3.75
Post-Fire	10	DAUCAR	2	3	3	3	2.75
Post-Fire	10	VICSAT	1	1	4	3	2.25
Post-Fire	10	HYPPER	1	2	1	0	1
Post-Fire	10	CERNUT	1	1	0	0	0.5
Post-Fire	10	CERNUT	1		0	0	0.25
Post-Fire	10	MYODIS	1	1	1	1	1
Post-Fire	10	Madia sp.	1	1	1	0	0.75
Post-Fire	10	GERDIS	1	1	2	2	1.5
Post-Fire	10	FESROE	1	1	2	0	1
Post-Fire	10	CYNECH	2	2	3	0	1.75
Post-Fire	10	ACHMIL	0	1	0	0	0.25
Post-Fire	10	VULBRO	0	1	1	0	0.5
Post-Fire	10	BROSIT	0	3	3	5	2.75
Post-Fire	10	BRODIA	0	1	0	0	0.25
Post-Fire	10	SIDMAL	0	0	4	10	3.5
Post-Fire	10	AVESAT	0	0	1	0	0.25
Post-Fire	10	DACGLO	0	0	1	3	1
Post-Fire	10	PLALAN	0	0	0	1	0.25
Post-Fire	11	Bare Ground	2	2	15	5	6
Post-Fire	11	Moss	0	0	0	0	0
Post-Fire	11	Thatch	20	35	10	10	18.75
Post-Fire	11	Rock	0	0	0	0	0
Post-Fire	11	CIRARV	5	5	3	4	4.25
Post-Fire	11	BRODIA	3	4	1	0	2
Post-Fire	11	ARRELA	50	25	15	15	26.25
Post-Fire	11	DACGLO	15	5	3	2	6.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	11	CYNECH	3	1	5	5	3.5
Post-Fire	11	MADGLO	3	1	0	0	1
Post-Fire	11	TORARV	5	3	3	5	4
Post-Fire	11	CERNUT	3	1	2	1	1.75
Post-Fire	11	GERDIS	5	5	2	2	3.5
Post-Fire	11	TOXDIV	3	0	0	0	0.75
Post-Fire	11	VICSAT	1	1	1	1	1
Post-Fire	11	VERARV	1	0	1	1	0.75
Post-Fire	11	HYPPER	1	0	1	1	0.75
Post-Fire	11	MYODIS	1	1	1	1	1
Post-Fire	11	HOLLAN	3	0	5	2	2.5
Post-Fire	11	SENJAC	0	2	0	0	0.5
Post-Fire	11	BROHOR	0	1	1	1	0.75
Post-Fire	11	LEUVUL	1	4	5	5	3.75
Post-Fire	11	FRAVIR	0	2	0	0	0.5
Post-Fire	11	DAUCAR	0	1	1	1	0.75
Post-Fire	11	HYPRAD	0	1	0	0	0.25
Post-Fire	11	AIRCAR	0	1	0	0	0.25
Post-Fire	11	OSMBER	0	1	0	0	0.25
Post-Fire	11	BROSIT	0	4	2	0	1.5
Post-Fire	11	BROCOR	0	0	1	0	0.25
Post-Fire	11	SATDOU	0	0	2	0	0.5
Post-Fire	11	POTGRA	0	0	1	0	0.25
Post-Fire	11	ACEMAC	0	0	1	0	0.25
Post-Fire	11	ACHMIL	0	0	3	0	0.75
Post-Fire	11	CIRVUL	0	0	0	4	1
Post-Fire	11	SHEARV	0	0	0	1	0.25
Post-Fire	12	Bare Ground	0	0	2	0	0.5
Post-Fire	12	Moss	0	0	0	0	0
Post-Fire	12	Thatch	25	30	25	25	26.25
Post-Fire	12	Rock	0	0	0	0	0
Post-Fire	12	ARRELA	60	70	45	35	52.5
Post-Fire	12	LEUVUL	40	25	30	25	30
Post-Fire	12	DACGLO	3	3	1	5	3
Post-Fire	12	RUBURS	3	3	0	5	2.75
Post-Fire	12	HOLLAN	1	1	0	0	0.5
Post-Fire	12	GERDIS	5	3	3	5	4
Post-Fire	12	ACHMIL	1	1	3	2	1.75
Post-Fire	12	CIRARV	1	1	1	0	0.75
Post-Fire	12	ACEMAC	2	0	0	1	0.75
Post-Fire	12	TORARV	2	0	2	1	1.25
Post-Fire	12	MYODIS	1	1	1	1	1
Post-Fire	12	HYPPER	1	1	1	0	0.75
Post-Fire	12	VICSAT	1	1	0	0	0.5

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	12	DICCON	1	0	0	0	0.25
Post-Fire	12	DAUCAR	1	1	1	3	1.5
Post-Fire	12	CIRVUL	0	1	3	1	1.25
Post-Fire	12	MADGLO	0	1	0	0	0.25
Post-Fire	12	SENJAC	0	2	0	2	1
Post-Fire	12	CYNECH	0	2	4	0	1.5
Post-Fire	12	GALPAR	0	0	1	0	0.25
Post-Fire	12	LOTMIC	0	0	2	0	0.5
Post-Fire	12	BROSIT	0	0	2	2	1
Post-Fire	12	EPICIL	0	0	0	1	0.25
Post-Fire	12	VERARV	0	0	0	1	0.25
Post-Fire	12	CERNUT	0	0	0	1	0.25
Post-Fire	13	Bare Ground	25	15	10	10	15
Post-Fire	13	Moss	5	10	5	5	6.25
Post-Fire	13	Thatch	5	3	3	2	3.25
Post-Fire	13	Rock	1	0	0	1	0.5
Post-Fire	13	AIRCAR	20	10	15	20	16.25
Post-Fire	13	KOEMAC	5	1	3	3	3
Post-Fire	13	PLALAN	10	15	5	5	8.75
Post-Fire	13	LEUVUL	10	5	10	10	8.75
Post-Fire	13	VULBRO	10	10	10	15	11.25
Post-Fire	13	CALTOL	3	3	5	5	4
Post-Fire	13	HYPRAD	2	0	0	1	0.75
Post-Fire	13	BROHOR	2	1	2	2	1.75
Post-Fire	13	ELYGLA	3	5	5	5	4.5
Post-Fire	13	CYNECH	3	1	10	4	4.5
Post-Fire	13	LOTMIC	1	1	1	1	1
Post-Fire	13	GALPAR	1	1	1	0	0.75
Post-Fire	13	TOXDIV	1	0	0	0	0.25
Post-Fire	13	CARTUM	5	5	1	1	3
Post-Fire	13	FRAVIR	5	5	5	5	5
Post-Fire	13	POTGRA	1	0	2	1	1
Post-Fire	13	BROSIT	4	3	10	10	6.75
Post-Fire	13	POASEC	1	1	0	0	0.5
Post-Fire	13	DANCAL	0	5	5	5	3.75
Post-Fire	13	GERDIS	0	1	1	0	0.5
Post-Fire	13	DAUCAR	0	1	0	0	0.25
Post-Fire	13	MADGLO	0	2	1	1	1
Post-Fire	13	FESROE	0	3	4	1	2
Post-Fire	13	EPICIL	1	1	0	1	0.75
Post-Fire	13	CERNUT	0	1	1	1	0.75
Post-Fire	13	DACGLO	0	1	0	0	0.25
Post-Fire	13	LUPRIV	0	0	2	0	0.5
Post-Fire	13	ERILAN	0	0	1	0	0.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	14	Bare Ground	3	2	2	1	2
Post-Fire	14	Moss	3	2	0	3	2
Post-Fire	14	Thatch	10	15	10	5	10
Post-Fire	14	Rock	0	0	0	0	0
Post-Fire	14	BROCOR	1	2	1	0	1
Post-Fire	14	ARRELA	5	10	3	5	5.75
Post-Fire	14	FRAVIR	20	15	15	10	15
Post-Fire	14	LEUVUL	1	0	1	2	1
Post-Fire	14	POTGRA	5	10	0	2	4.25
Post-Fire	14	TORARV	1	1	1	1	1
Post-Fire	14	ELYREP	10	5	3	5	5.75
Post-Fire	14	CARTUM	5	10	10	15	10
Post-Fire	14	MYODIS	1	1	1	1	1
Post-Fire	14	CERNUT	1	1	1	2	1.25
Post-Fire	14	GERDIS	1	2	2	1	1.5
Post-Fire	14	BROSIT	2	0	3	2	1.75
Post-Fire	14	SCHARU	5	5	25	5	10
Post-Fire	14	CARDEN	1	0	3	3	1.75
Post-Fire	14	EPICIL	0	1	2	0	0.75
Post-Fire	14	VERARV	0	0	1	1	0.5
Post-Fire	14	HYPPER	0	0	1	1	0.5
Post-Fire	14	ELYGLA	0	0	2	2	1
Post-Fire	14	POASEC	0	0	1	2	0.75
Post-Fire	14	HYPPER	0	0	1	0	0.25
Post-Fire	15	Bare Ground	10	3	1	5	4.75
Post-Fire	15	Moss	0	3	0	3	1.5
Post-Fire	15	Thatch	5	2	5	3	3.75
Post-Fire	15	Rock	0	0	0	0	0
Post-Fire	15	BROSIT	10	10	10	5	8.75
Post-Fire	15	SCHARU	2	0	0	0	0.5
Post-Fire	15	ELYGLA	5	5	0	10	5
Post-Fire	15	FESROE	5	5	10	15	8.75
Post-Fire	15	AIRCAR	2	3	2	5	3
Post-Fire	15	BROHOR	5	3	2	0	2.5
Post-Fire	15	VULBRO	2	5	5	2	3.5
Post-Fire	15	CYNECH	1	10	10	1	5.5
Post-Fire	15	EPICIL	1	0	0	1	0.5
Post-Fire	15	PRUVUL	3	0	0	0	0.75
Post-Fire	15	ERILAN	5	15	2	5	6.75
Post-Fire	15	POTGRA	2	0	0	0	0.5
Post-Fire	15	HYPRAD	3	3	0	3	2.25
Post-Fire	15	LEUVUL	2	0	1	2	1.25
Post-Fire	15	FRAVIR	20	25	25	20	22.5
Post-Fire	15	DAUCAR	2	2	2	2	2

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	15	CARDEN	2	2	1	0	1.25
Post-Fire	15	Lotus sp.	1	2	3	5	2.75
Post-Fire	15	VICHIR	1	1	1	0	0.75
Post-Fire	15	LOTMIC	1	0	0	0	0.25
Post-Fire	15	CARTUM	1	2	2	1	1.5
Post-Fire	15	ACHMIL	1	3	5	5	3.5
Post-Fire	15	BROCOR	1	0	0	1	0.5
Post-Fire	15	GALPAR	2	1	1	2	1.5
Post-Fire	15	DANCAL	1	1	2	1	1.25
Post-Fire	15	ELYREP	2	0	0	0	0.5
Post-Fire	15	VICSAT	0	1	0	0	0.25
Post-Fire	15	ARRELA	0	5	5	5	3.75
Post-Fire	15	DACGLO	0	1	0	0	0.25
Post-Fire	15	GERDIS	0	1	2	1	1
Post-Fire	15	MADGLO	0	0	3	2	1.25
Post-Fire	15	SENJAC	0	0	0	3	0.75
Post-Fire	16	Bare Ground	5	5	10	15	8.75
Post-Fire	16	Moss	5	2	10	10	6.75
Post-Fire	16	Thatch	10	3	4	5	5.5
Post-Fire	16	Rock	0	0	0	0	0
Post-Fire	16	FRAVIR	25	15	20	30	22.5
Post-Fire	16	ARRELA	15	5	5	10	8.75
Post-Fire	16	DAUCAR	3	3	5	3	3.5
Post-Fire	16	GERDIS	4	10	1	2	4.25
Post-Fire	16	ELYGLA	5	4	5	10	6
Post-Fire	16	PLALAN	10	5	2	5	5.5
Post-Fire	16	PRUVUL	3	3	1	0	1.75
Post-Fire	16	LEUVUL	10	15	25	10	15
Post-Fire	16	POTGRA	5	3	5	5	4.5
Post-Fire	16	CIRARV	1	0	1	1	0.75
Post-Fire	16	HYPPER	1	1	0	0	0.5
Post-Fire	16	AIRCAR	1	2	0	1	1
Post-Fire	16	CARDEN	1	1	1	1	1
Post-Fire	16	CARTUM	1	1	10	5	4.25
Post-Fire	16	DACGLO	3	0	0	0	0.75
Post-Fire	16	BROSIT	5	2	3	4	3.5
Post-Fire	16	LOTMIC	1	1	0	0	0.5
Post-Fire	16	SENJAC	2	1	1	0	1
Post-Fire	16	FESROE	1	1	1	2	1.25
Post-Fire	16	KOEMAC	0	5	2	3	2.5
Post-Fire	16	TORARV	0	1	0	1	0.5
Post-Fire	16	GALPAR	0	3	5	2	2.5
Post-Fire	16	CYNECH	0	1	0	0	0.25
Post-Fire	16	CENERY	0	1	0	0	0.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m ²)
Post-Fire	16	VERARV	0	0	1	1	0.5
Post-Fire	16	MYODIS	0	0	1	1	0.5
Post-Fire	16	ROSNUT	0	0	2	0	0.5
Post-Fire	16	CALTOL	0	0	1	0	0.25
Post-Fire	16	POASEC	0	1	1	2	1
Post-Fire	17	Bare Ground	10	15	5	5	8.75
Post-Fire	17	Moss	0	0	0	0	0
Post-Fire	17	Thatch	3	2	3	3	2.75
Post-Fire	17	Rock	0	0	0	0	0
Post-Fire	17	SCHARU	50	30	60	20	40
Post-Fire	17	ELYGLA	3	10	0	0	3.25
Post-Fire	17	POTGRA	5	5	2	3	3.75
Post-Fire	17	FRAVIR	15	10	10	10	11.25
Post-Fire	17	DAUCAR	5	5	4	4	4.5
Post-Fire	17	BROCOR	1	0	0	0	0.25
Post-Fire	17	LOTMIC	2	3	0	5	2.5
Post-Fire	17	PRUVUL	2	5	1	0	2
Post-Fire	17	GALPAR	2	5	3	3	3.25
Post-Fire	17	LEUVUL	2	4	3	5	3.5
Post-Fire	17	VICSAT	1	0	1	1	0.75
Post-Fire	17	Lotus sp.	5	2	3	0	2.5
Post-Fire	17	MYODIS	1	1	1	1	1
Post-Fire	17	VICHIR	2	1	1	2	1.5
Post-Fire	17	CARTUM	1	4	3	0	2
Post-Fire	17	GERDIS	2	1	2	1	1.5
Post-Fire	17	ERILAN	1	0	0	0	0.25
Post-Fire	17	AIRCAR	1	2	0	1	1
Post-Fire	17	LINBIE	1	0	0	2	0.75
Post-Fire	17	POASEC	1	0	0	0	0.25
Post-Fire	17	TORARV	1	1	0	0	0.5
Post-Fire	17	HYPPER	0	2	0	1	0.75
Post-Fire	17	ACHMIL	0	2	1	1	1
Post-Fire	17	CARDEN	0	1	0	0	0.25
Post-Fire	17	DACGLO	0	0	1	0	0.25
Post-Fire	17	VENDUB	0	0	1	0	0.25
Post-Fire	17	CAMQUA	0	0	0	1	0.25
Post-Fire	18	Bare Ground	20	20	25	15	20
Post-Fire	18	Moss	0	0	0	0	0
Post-Fire	18	Thatch	3	5	5	15	7
Post-Fire	18	Rock	1	0	0	0	0.25
Post-Fire	18	PTEAQU	10	15	0	0	6.25
Post-Fire	18	CYNECH	35	25	25	20	26.25
Post-Fire	18	ARRELA	20	10	10	15	13.75
Post-Fire	18	TOXDIV	5	5	10	5	6.25

Data Set	Plot #	Species Code	1	2	3	4	% Cover/(2m²)
Post-Fire	18	TORARV	3	0	5	3	2.75
Post-Fire	18	FRAVIR	1	2	3	1	1.75
Post-Fire	18	Lotus sp.	2	10	2	3	4.25
Post-Fire	18	EPICIL	1	0	1	0	0.5
Post-Fire	18	VICSAT	2	1	0	0	0.75
Post-Fire	18	BRODIA	3	0	0	3	1.5
Post-Fire	18	ELYGLA	5	0	0	5	2.5
Post-Fire	18	BROSIT	3	5	5	5	4.5
Post-Fire	18	DAUCAR	5	5	2	1	3.25
Post-Fire	18	SENJAC	2	0	1	0	0.75
Post-Fire	18	HYPRAD	1	1	0	1	0.75
Post-Fire	18	CLAPUR	1	1	0	0	0.5
Post-Fire	18	VERARV	1	1	1	1	1
Post-Fire	18	PLALAN	1	0	2	0	0.75
Post-Fire	18	GERDIS	1	1	5	3	2.5
Post-Fire	18	ROSNUT	0	5	0	0	1.25
Post-Fire	18	ERILAN	0	2	0	0	0.5
Post-Fire	18	BROHOR	0	1	0	0	0.25
Post-Fire	18	DACGLO	0	1	2	5	2
Post-Fire	18	LEUVUL	0	3	3	5	2.75
Post-Fire	18	SCHARU	0	1	0	0	0.25
Post-Fire	18	GALPAR	0	1	1	1	0.75
Post-Fire	18	BROCOR	0	0	2	0	0.5
Post-Fire	18	CERNUT	1	1	1	1	1

APPENDIX B

Fitton Green Fire Monitoring species list

Table B1. Alphabetical list of species observed on fire monitoring plots in 2015 (pre-burn) and 2016 (post-burn).

Species Code	Scientific Name	Origin	Life History	Growth Form
ACEMAC	<i>Acer macrophyllum</i>	Native	Perennial	Woody
ACHMIL	<i>Achillea millifolium</i>	Native	Perennial	Forb
AGRSTO	<i>Agrostis stolonifera</i>	Introduced	Perennial	Graminoid
AIRCAR	<i>Aira caryophylla</i>	Introduced	Annual	Graminoid
ARRELA	<i>Arrhenatherum elatius</i>	Introduced	Perennial	Graminoid
AVESAT	<i>Avena sativa</i>	Introduced	Annual	Graminoid
BRASYL	<i>Brachypodium sylvaticum</i>	Introduced	Perennial	Graminoid
BROCOM	<i>Bromus commutatus?</i>	Introduced	Annual	Graminoid
BROCOR	<i>Brodiaea coronaria</i>	Native	Perennial	Forb
BRODIA	<i>Bromus diandrus</i>	Introduced	Perennial	Graminoid
BROHOR	<i>Bromus hordeaceus</i>	Introduced	Annual	Graminoid
BROINE	<i>Bromus inermis</i>	Introduced	Perennial	Graminoid
BROSIT	<i>Bromus sithensis</i>	Native	Perennial	Graminoid
CALTOL	<i>Calochortus tolmiei</i>	Native	Perennial	Forb
CAMLEC	<i>Camassia leichtlinii</i>	Native	Perennial	Forb
CAMQUA	<i>Camassia quamash</i>	Native	Perennial	Forb
CARDEN	<i>Carex densa</i>	Native	Perennial	Graminoid
Carex sp.	<i>Carex sp.</i>	Native	Perennial	Graminoid
CARTUM	<i>Carex tumulicola</i>	Native	Perennial	Graminoid
CENERY	<i>Centaurium erythraea</i>	Introduced	Annual	Forb
CERNUT	<i>Cerastium nutans</i>	Native	Annual	Forb
CIRARV	<i>Cirsium arvense</i>	Introduced	Perennial	Forb
CIRVUL	<i>Cirsium vulgare</i>	Introduced	Biennial	Forb
CLAAMO	<i>Clarkia amoena</i>	Native	Annual	Forb
CLAPUR	<i>Clarkia purpurea</i>	Native	Annual	Forb
Clarkia	<i>Clarkia sp.</i>	Native	Annual	Forb
CLIDOU	<i>Clinopodium douglasii</i>	Native	Perennial	Forb
CRAMON	<i>Crataegus monogyna</i>	Introduced	Perennial	Woody
CRESET	<i>Crepis setosa</i>	Introduced	Annual	Forb
CYNECH	<i>Cynosurus echinatus</i>	Introduced	Annual	Graminoid
DACGLO	<i>Dactylis glomerata</i>	Introduced	Perennial	Graminoid
DANCAL	<i>Danthonia californica</i>	Native	Perennial	Graminoid
DAUCAR	<i>Daucus carota</i>	Introduced	Perennial	Forb

Species Code	Scientific Name	Origin	Life History	Growth Form
DELMEN	<i>Delphinium menziesii</i>	Native	Perennial	Forb
DICCON	<i>Dichelostemma congestum</i>	Native	Perennial	Forb
ECHCRU	<i>Echinochloa crus-galli</i>	Introduced	Annual	Graminoid
ELYGLA	<i>Elymus glaucus</i>	Native	Perennial	Graminoid
ELYREP	<i>Elymus repens</i>	Introduced	Perennial	Graminoid
EPICIL	<i>Epilobium ciliatum</i>	Native	Perennial	Forb
ERILAN	<i>Eriophyllum lanatum</i>	Native	Perennial	Forb
FESROE	<i>Festuca roemeri</i>	Native	Perennial	Graminoid
FESRUB	<i>Festuca rubra</i>	Native	Perennial	Graminoid
FRAVIR	<i>Fragaria virginiana</i>	Native	Perennial	Forb
GALPAR	<i>Galium parisiense</i>	Introduced	Annual	Forb
GERDIS	<i>Geranium dissectum</i>	Introduced	Annual	Forb
HEIALB	<i>Hieracium albiflorum</i>	Native	Perennial	Forb
HOLLAN	<i>Holcus lanatus</i>	Introduced	Perennial	Graminoid
HYPPER	<i>Hypericum perforatum</i>	Introduced	Perennial	Forb
HYPRAD	<i>Hypochaeris radicata</i>	Introduced	Perennial	Forb
KOEMAC	<i>Koeleria macratha</i>	Native	Perennial	Graminoid
Lathyrus sp.	<i>Lathyrus sp.</i>	unknown	unknown	Forb
LEONUD	<i>Leontodon nudicaulis</i>	Introduced	Perennial	Forb
LEUVUL	<i>Leucanthemum vulgare</i>	Introduced	Perennial	Forb
LINBIE	<i>Linum bienne</i>	Introduced	Perennial	Forb
LOLPER	<i>Lolium perenne</i>	Introduced	Perennial	Graminoid
LOTDEN	<i>Lotus denticulatus</i>	Native	Annual	Forb
LOTMIC	<i>Lotus micranthus</i>	Native	Annual	Forb
Lotus sp.	<i>Lotus sp.</i>	unknown	unknown	Forb
Lupinus sp.	<i>Lupinus sp.</i>	Native	Perennial	Forb
LUPRIV	<i>Lupinus rivularis</i>	Native	Perennial	Forb
MADGLO	<i>Madia glomerata</i>	Native	Annual	Forb
Madia sp.	<i>Madia sp.</i>	Native	Annual	Forb
MADSAT	<i>Madia sativa</i>	Native	Annual	Forb
MARORE	<i>Marah oreganus</i>	Native	Perennial	Forb
MYODIS	<i>Myosotis discolor</i>	Introduced	Annual	Forb
OSMBER	<i>Osmorhiza berteroi</i>	Native	Perennial	Forb
PLALAN	<i>Plantago lanceolata</i>	Introduced	Perennial	Forb
PLECON	<i>Plectritis congesta</i>	Native	Annual	Forb
POASEC	<i>Poa secunda</i>	Native	Perennial	Graminoid
POTGRA	<i>Potentilla gracilis</i>	Native	Perennial	Forb
PRUVUL	<i>Prunella vulgaris</i>	Native	Perennial	Forb
PSEMEN	<i>Pseudotsuga menziesii</i>	Native	Perennial	Woody

Species Code	Scientific Name	Origin	Life History	Growth Form
PTEAQU	<i>Pteridium aquilinum</i>	Native	Perennial	Forb
QUEGAR	<i>Quercus garryana</i>	Native	Perennial	Woody
ROSNUT	<i>Rosa nutkana</i>	Native	Perennial	Woody
RUBBIF	<i>Rubus bifrons</i>	Introduced	Perennial	Woody
RUBURS	<i>Rubus ursinus</i>	Native	Perennial	Forb
RUMACE	<i>Rumex acetosella</i>	Introduced	Perennial	Forb
SANBIP	<i>Sanicula bipinnatifida</i>	Native	Perennial	Forb
SATDOU	<i>Satureja douglasii</i>	Native	Perennial	Forb
SCHARU	<i>Schedonorus arundinaceus</i>	Introduced	Perennial	Graminoid
SENJAC	<i>Senecio jacobaea</i>	Introduced	Perennial	Forb
SHEARV	<i>Sherardia arvensis</i>	Introduced	Annual	Forb
Sidalcea sp.	<i>Sidalcea sp.</i>	Native	Perennial	Forb
SIDMAL	<i>Sidalcea malviflora</i>	Native	Perennial	Forb
SONASP	<i>Sonchus asper</i>	Introduced	Annual	Forb
TAECAP	<i>Taeniatherum caput-medusae</i>	Introduced	Annual	Graminoid
TORARV	<i>Torilis arvensis</i>	Introduced	Annual	Forb
TOXDIV	<i>Toxicodendron diversilobum</i>	Native	Perennial	Woody
TRIDUB	<i>Trifolium dubium</i>	Introduced	Annual	Forb
TRIHYA	<i>Triteleia hyacinthina</i>	Native	Perennial	Forb
VENDUB	<i>Ventenata dubia</i>	Introduced	Annual	Graminoid
VERARV	<i>Veronica arvensis</i>	Introduced	Annual	Forb
VICHIR	<i>Vicia hirsuta</i>	Introduced	Annual	Forb
VICSAT	<i>Vicia sativa</i>	Introduced	Annual	Forb
VULBRO	<i>Vulpia bromiodes</i>	Introduced	Annual	Graminoid

APPENDIX C

Plot data collection form

Date/Initials: _____					
Plot #: _____					
	% cover by 1m quad				
Species	1	2	3	4	Notes
Bare Ground					
Moss					
Thatch					
Rock					

APPENDIX D

Two Sample t-Test Results

Table D1. Two sample t-Test results examining the significance of differences in average cover and species richness between pre-burn (2015) and post-burn (2016) plot data. All tests completed with 18 observations pre- and post-fire and a hypothesized mean difference of 0.

	Bare Ground		Moss Cover		Thatch Cover	
	Pre-Fire	Post-Fire	Pre-Fire	Post-Fire	Pre-Fire	Post-Fire
Mean	2.61	11.24	0.54	1.40	25.00	7.51
Variance	1.74	66.21	1.09	6.07	310.65	53.98
df	18		23		23	
t Stat	-4.439		-1.366		3.885	
P(T<=t) one-tail	0.000		0.093		0.000	
t Critical one-tail	1.734		1.714		1.714	

	Total Cover		Native Cover		Introduced Cover	
	Pre-Fire	Post-Fire	Pre-Fire	Post-Fire	Pre-Fire	Post-Fire
Mean	94.33	84.26	29.33	29.56	64.94	54.00
Variance	764.91	195.03	759.54	305.22	759.22	388.86
df	25		29		31	
t Stat	1.379		-0.029		1.370	
P(T<=t) one-tail	0.090		0.489		0.090	
t Critical one-tail	1.708		1.699		1.696	

	Woody Cover		Total Forb Cover		Introduced Forb Cover		Native Forb Cover	
	Pre-Fire	Post-Fire	Pre-Fire	Post-Fire	Pre-Fire	Post-Fire	Pre-Fire	Post-Fire
Mean	6.57	0.63	40.69	40.83	27.93	20.89	12.71	19.24
Variance	504.11	3.04	317.26	144.36	179.92	95.32	99.38	134.90
df	17		30		31		33	
t Stat	1.120		-0.027		1.80		-1.81	
P(T<=t) one-tail	0.139		0.489		0.04		0.04	
t Critical one-tail	1.740		1.697		1.70		1.69	

	Total Graminoid Cover		Introduced Graminoid Cover		Native Graminoid Cover	
	<i>Pre-Fire</i>	<i>Post-Fire</i>	<i>Pre-Fire</i>	<i>Post-Fire</i>	<i>Pre-Fire</i>	<i>Post-Fire</i>
Mean	47.07	42.81	36.81	33.08	10.26	9.72
Variance	437.47	151.01	493.59	220.29	81.75	62.37
df	27		30		33	
t Stat	0.746		0.59		0.19	
P(T<=t) one-tail	0.231		0.28		0.42	
t Critical one-tail	1.703		1.70		1.69	

	Plot Richness		Native Richness		Introduced Richness		Woody Richness	
	<i>Pre-Fire</i>	<i>Post-Fire</i>	<i>Pre-Fire</i>	<i>Post-Fire</i>	<i>Pre-Fire</i>	<i>Post-Fire</i>	<i>Pre-Fire</i>	<i>Post-Fire</i>
Mean	24.78	29.11	10.28	12.11	14.39	16.50	0.89	0.56
Variance	29.71	14.58	11.04	6.69	19.55	10.15	1.16	0.50
df	30		32		31		29	
t Stat	-2.763		-1.85		-1.644		1.098	
P(T<=t) one-tail	0.005		0.04		0.055		0.141	
t Critical one-tail	1.697		1.69		1.696		1.699	

	Plot Richness		Forb Richness		Graminoid Richness	
	<i>Pre-Fire</i>	<i>Post-Fire</i>	<i>Pre-Fire</i>	<i>Post-Fire</i>	<i>Pre-Fire</i>	<i>Post-Fire</i>
Mean	24.78	29.11	14.39	17.83	9.50	10.72
Variance	29.71	14.58	13.66	6.74	6.62	7.39
df	30		30		34	
t Stat	-2.763		-3.24		-1.39	
P(T<=t) one-tail	0.005		0.00		0.09	
t Critical one-tail	1.697		1.70		1.69	

