

Inspect pasture results

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```
# Create the vectors that hold the land-uses that we want to keep with
# different use intensities
land_uses_separate <- c("Primary","Cropland", "ISV", "Plantation forest")

# Create a vector with the land-uses where we want to merge the light
# and intense use intensities
land_uses_light_intense <- c("Primary", "Cropland", "ISV", "Plantation forest")

# Merge LUI for abundance
diversity_all_abundance <- Merge_landUses_and_intensities(dataset = diversity_all_abundance,
                                                           index = 1,
                                                           land_uses_separate_intensities = land_uses_separate,
                                                           land_uses_merge_light_intense = land_uses_light_intense,
                                                           "Primary Minimal use")

## Warning: package 'Hmisc' was built under R version 3.6.3

## Loading required package: lattice

## Warning: package 'lattice' was built under R version 3.6.1

## Loading required package: survival

## Warning: package 'survival' was built under R version 3.6.3

## Loading required package: Formula

##
## Attaching package: 'Hmisc'

## The following objects are masked from 'package:dplyr':
##
##      src, summarize

## The following objects are masked from 'package:base':
##
##      format.pval, units

## Warning: package 'stringr' was built under R version 3.6.1
```

```

# Drop NA values
diversity_abundance <- drop_na(diversity_all_abundance,
                              Total_abundance, LandUse.1) %>%

  droplevels()

# Get the SSBS of sites belonging to pasture and primary minimal use for Plants

abundance <- diversity_abundance %>%

  # Filter LUI
  dplyr::filter(LandUse.1 %in% c("Primary Minimal use", "Pasture All")) %>%

  # Filter plants
  dplyr::filter(Kingdom %in% c("Plantae")) %>%

  # drop levels
  droplevels()

# Get some statistics of abundance for both land uses
abundance %>%

  # Group by LUI
  group_by(LandUse.1) %>%

  # Calculate statistics
  summarise(mean = mean(RescaledAbundance),
            sd = sd(RescaledAbundance),
            qt_1 = quantile(RescaledAbundance, prob=c(0.25)),
            qt_2 = quantile(RescaledAbundance, prob=c(0.5)),
            qt_3 = quantile(RescaledAbundance, prob=c(0.75)),
            qt_4 = quantile(RescaledAbundance, prob=c(1)))

## # A tibble: 2 x 7
##   LandUse.1      mean    sd  qt_1  qt_2  qt_3  qt_4
##   <fct>        <dbl> <dbl> <dbl> <dbl> <dbl> <dbl>
## 1 Primary Minimal use 0.234 0.265 0.0328 0.154 0.332    1
## 2 Pasture All      0.250 0.301 0.0244 0.0674 0.427    1

# I am going to check the sites that have a rescaled abundance greater than the median
# for pasture

pasture_abundance <- abundance %>%

  # Filter pasture
  filter(LandUse.1 == "Pasture All") %>%

  # Filter sites with species richness greater than the median
  filter(RescaledAbundance > 0.07) %>%

  # droplevels
  droplevels() %>%

  pull(SSBS) %>% as.character()

```

```

pasture_abundance_inspect <- sp_abundance %>%

# subset the sites we want to inspect
base::subset(SSBS %in% pasture_abundance) %>%

# Subset only plants dispersed by endozoochory
base::subset(Kingdom == "Plantae") %>%

# drop levels
droplevels() %>%

# select columns we are interested in
dplyr::select(Country, Source_ID, SS, Diversity_metric_type, Diversity_metric_unit,
              Habitat_as_described, Predominant_land_use, Use_intensity, SSBS,
              Best_guess_binomial, Taxon_name_entered, Measurement, Kingdom) %>%

# Select species present(1) or with abundance greater than 0
dplyr::filter(Measurement != 0)

# Resulting number of species
length(unique(pasture_abundance_inspect$Best_guess_binomial))

```

```
## [1] 30
```

```

# Resulting number of studies
length(unique(pasture_abundance_inspect$SS))

```

```
## [1] 5
```

```

abundance <- read.csv("./Abundance_inspect.csv", header = TRUE, sep = ";")
kable(abundance, format="latex", booktabs=TRUE) %>%
  kable_styling(latex_options="scale_down")

```

SS	sites	Species	LUI	Dispersal	Agents	Grow.habit
CM1_2012_Katovai 1	2	Passiflora foetida	Pasture Int	endo	Vertebrates	Climbing herbaceous
SC1_2006_Mayfield 1	13	Rubus rosifolius	Pasture Min	Assumed endo	NA	Evergreen shrub
SC1_2006_Mayfield 1	13	Colocasia esculenta	Pasture Min	Assumed endo	NA	Tuberous-rooted to 1.5m
SC1_2006_Mayfield 1	13	Lantana trifolia	Pasture Lig	Zoochory - assumed endo	NA	Evergreen shrub
YY1_2015_Mandle 1	4	Cissampelos pareira	Pasture Min	endo	Vertebrates	Climbing plant or scandent shrub
YY1_2015_Mandle 1	4	Phoenix loureiroi	Pasture Min			
YY1_2015_Mandle 3	2	Randia dumetorum	Pasture Min	endo	Mammals(elephant)	Palm
YY1_2015_Mandle 3	2	Syzygium cumini	Pasture Min	Zoochory - assumed endo	-	Evergreen tropical tree
YY1_2016_Mohandass	6	Juncus effusus	Pasture Min/Lig	Endo and epi - wind and water	Machinery, domestic, deer, rabbits	Perennial herbaceous