warmXtrophic Project: SLA Plots

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Load in data

```
# Clear all existing data
rm(list=ls())

#Load packages
library(tidyverse)
#library(plotrix)

# Set working directory to Google Drive
#setwd("/Volumes/GoogleDrive/Shared drives/SpaCE_Lab_warmXtrophic/data/")

# Read in data
sla <- read.csv("/Volumes/GoogleDrive/Shared drives/SpaCE_Lab_warmXtrophic/data/L1/SLA/SLA_L1.csv")
unique(sla$species)
```

```
## [1] "Dasp" "Popr" "Cest" "Hisp" "Soca" "Ruac"
```

```
with(sla,table(sla$site,sla$species))
```

```
##
##        Cest Dasp Hisp Popr Ruac Soca
##   kbs     0    0   41    0    0   73
##   umbs  233  205    0  219  185    0
```

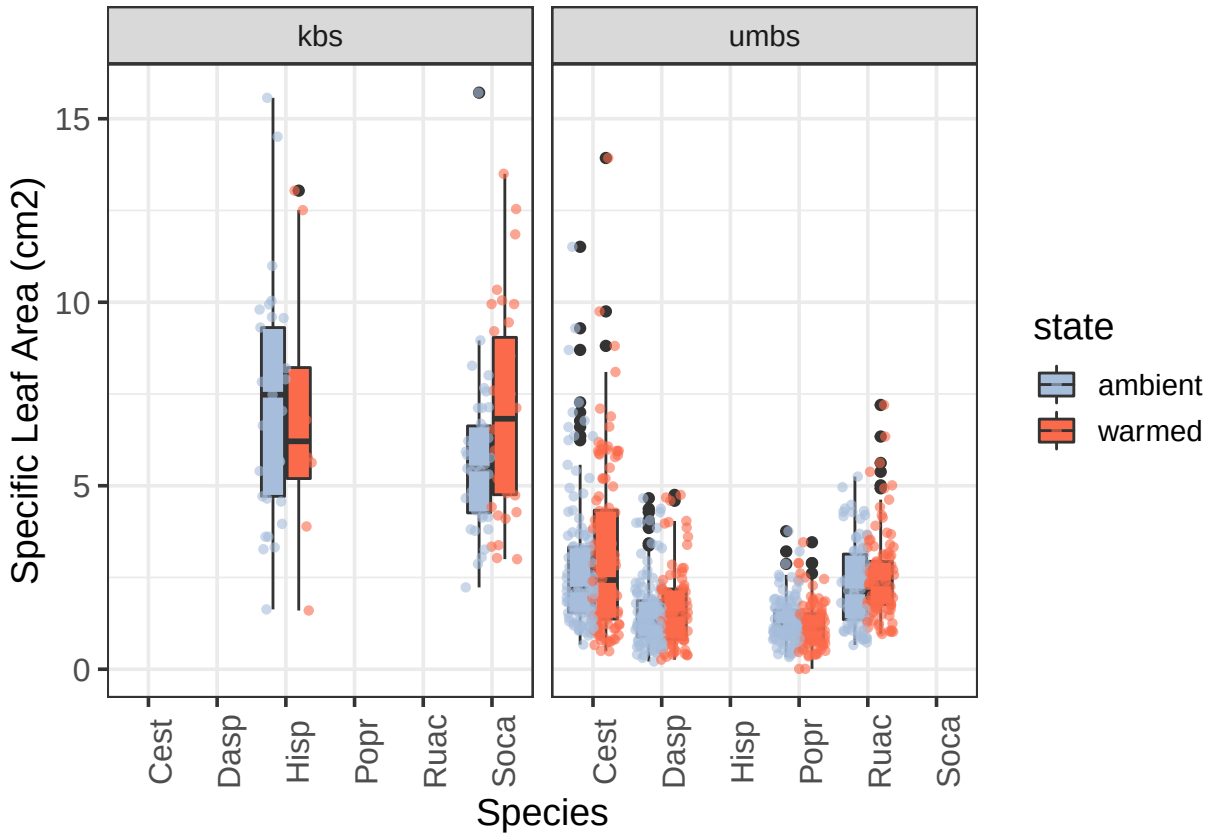
```
# Set ggplot2 plotting
# This code for ggplot2 sets the theme to mostly black and white
# (Arial font, and large font, base size=24)
theme_set(theme_bw(14))
theme_update(axis.text.x = element_text(size = 12, angle = 90),
             axis.text.y = element_text(size = 12))
```

SLA data

UMBS: Cest, Dasp, Popr, Ruac; KBS: Hisp, Soca

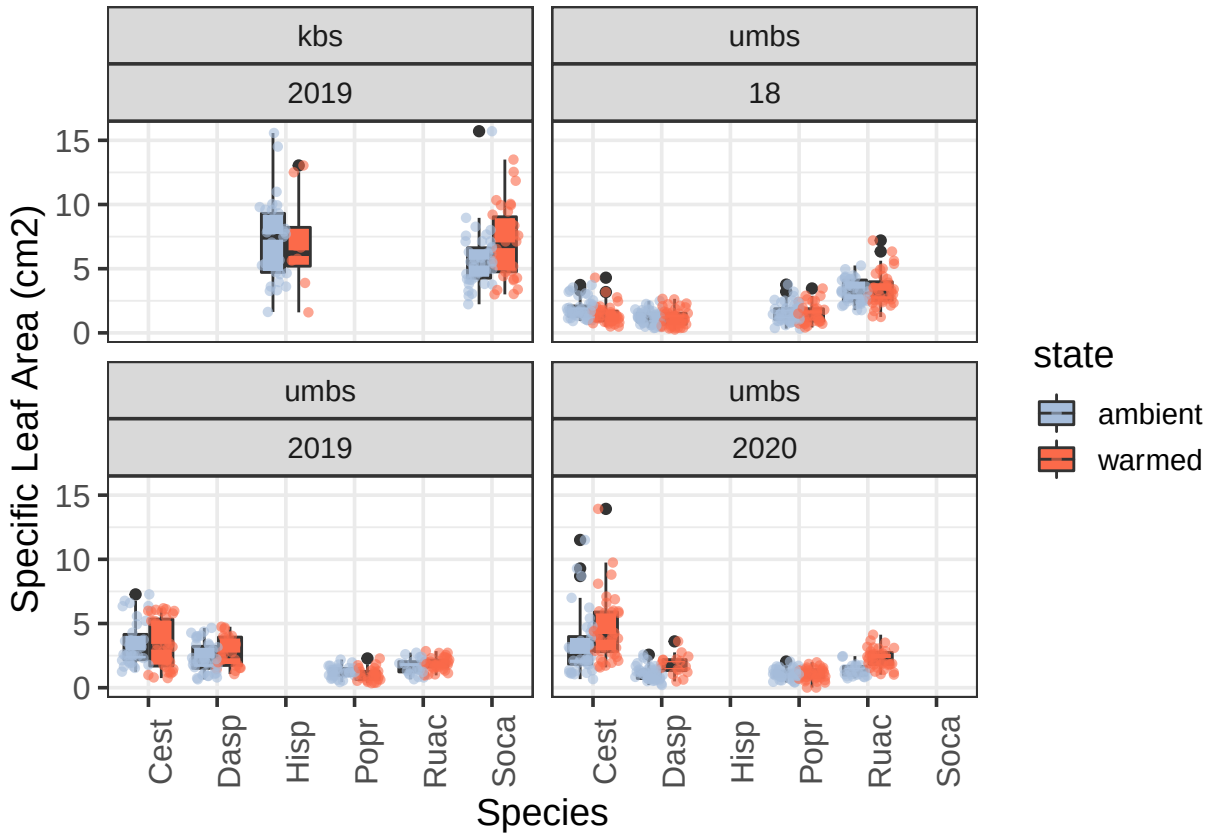
```
ggplot(sla, aes(x = species, y = area_cm2, fill = state)) +
        geom_boxplot() +
        labs(x = "Species", y = "Specific Leaf Area (cm2)") +
        scale_fill_manual(values = c("#a6bddb", "#fb6a4a")) +
```

```
        scale_x_discrete(labels=c("ambient" = "A", "warmed" = "W")) +
        geom_jitter(shape=16, position=position_jitterdodge(), alpha = 0.6, aes(colour = state)) +
        scale_color_manual(values = c("ambient" = "#a6bddb", "warmed" = "#fb6a4a")) +
        facet_wrap(~site)
```



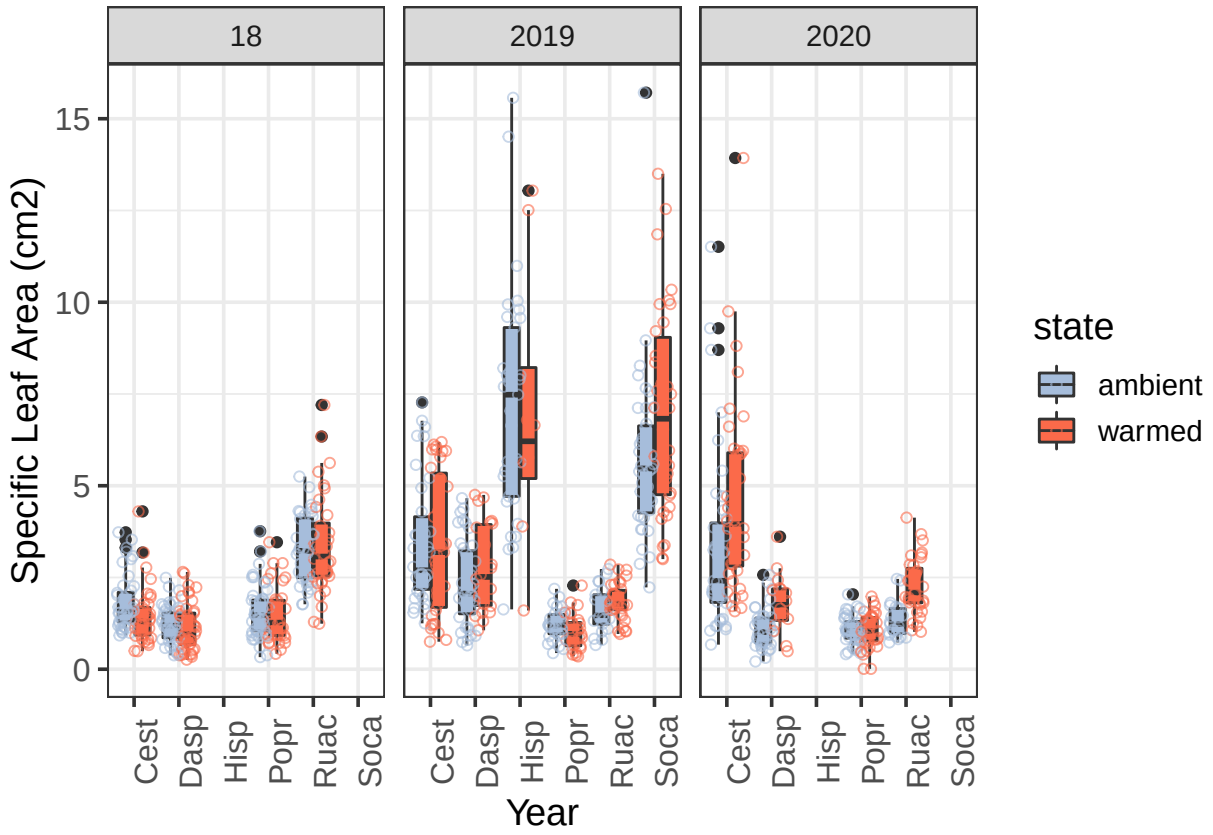

```
#ggsave(file="L2/SLA_KBS_UMBS_allyears.pdf", width=7,height=5)

ggplot(sla, aes(x = species, y = area_cm2, fill = state)) +
        geom_boxplot() +
        labs(x = "Species", y = "Specific Leaf Area (cm2)") +
        scale_fill_manual(values = c("#a6bddb", "#fb6a4a")) +
        scale_x_discrete(labels=c("ambient" = "A", "warmed" = "W")) +
        geom_jitter(shape=16, position=position_jitterdodge(), alpha = 0.6, aes(colour = state)) +
        scale_color_manual(values = c("ambient" = "#a6bddb", "warmed" = "#fb6a4a")) +
        facet_wrap(~site + year)
```




```
#ggsave(file="L2/SLA_KBS_UMBS_byyear.pdf", width=7,height=5)

ggplot(sla, aes(x = species, y = area_cm2, fill = state)) +
        geom_boxplot() +
        labs(x = "Year", y = "Specific Leaf Area (cm2)") +
        scale_fill_manual(values = c("#a6bddb", "#fb6a4a")) +
        scale_x_discrete(labels=c("ambient" = "A", "warmed" = "W")) +
        geom_jitter(shape=1, position=position_jitterdodge(), alpha = 0.6, aes(colour = state)) +
        scale_color_manual(values = c("ambient" = "#a6bddb", "warmed" = "#fb6a4a")) +
        facet_wrap(~year)
```




```
#ggsave(file="L2/SLA_KBS_UMBS_byspeciesyr.pdf", width=7,height=5)
```