Selection on within-individual variation in flowering time in Lathyrus vernus
Distributions and correlations among phenological parameters

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Contents

Read clean data from .csv file

```
data_ids <- read_csv("data/clean/data_ids.csv")
data_ids$imp_seed_preyed <- as.factor(data_ids$imp_seed_preyed)
data_ids$year <- as.factor(data_ids$year)
```

Distributions of phenological parameters
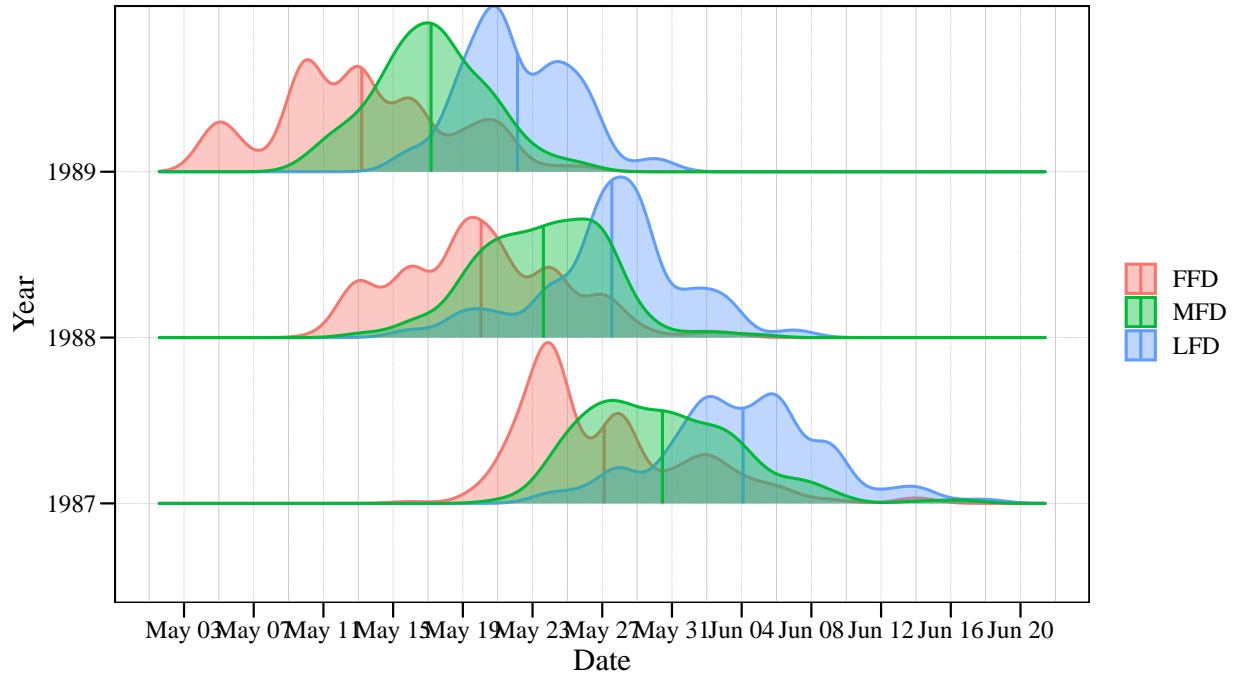
FFD, MFD and LFD

```
data_ids%>%select(year,id,FFD_c,MFD_c,LFD_c)%>%pivot_longer(cols=FFD_c:LFD_c,
                                                 names_to="name")%>%
  ggplot(aes(x=update(value,year=2000),y=year,fill=name,color=name))+
  my_theme_legend()+
  theme(panel.grid = element_line(color="grey",size=0.1,linetype=3))+
  geom_density_ridges(alpha=.4,scale=1,quantile_lines=TRUE,
                     quantile_fun=function(x,...)mean(x),size=0.75)+
  labs(x="Date",y="Year",fill=NULL,color=NULL)+
  scale_fill_discrete(limits=c("FFD_c", "MFD_c", "LFD_c"),
```

```
                        labels = c("FFD", "MFD", "LFD"))+
  scale_color_discrete(limits=c("FFD_c", "MFD_c", "LFD_c"),
                        labels = c("FFD", "MFD", "LFD"))+
  scale_x_date(date_labels="%b %d",date_breaks  ="4 days")
```


Correlations among phenological parameters

Session info

```
sessionInfo()
```

```
## R version 4.2.2 (2022-10-31 ucrt)
## Platform: x86_64-w64-mingw32/x64 (64-bit)
## Running under: Windows 10 x64 (build 22621)
##
## Matrix products: default
##
## locale:
## [1] LC_COLLATE=English_United States.utf8
## [2] LC_CTYPE=English_United States.utf8
## [3] LC_MONETARY=English_United States.utf8
## [4] LC_NUMERIC=C
## [5] LC_TIME=English_United States.utf8
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
```

```
## other attached packages:
##  [1] ggridges_0.5.4      ggthemes_4.2.4      RColorBrewer_1.1-3 moments_0.14.1
##  [5] lubridate_1.9.0     timechange_0.1.1    readxl_1.4.1        forcats_0.5.2
##  [9] stringr_1.5.0       dplyr_1.0.10        purrr_1.0.0         readr_2.1.3
## [13] tidyr_1.2.1         tibble_3.1.8        ggplot2_3.4.0       tidyverse_1.3.2
##
## loaded via a namespace (and not attached):
##  [1] assertthat_0.2.1    digest_0.6.31       utf8_1.2.2
##  [4] R6_2.5.1            cellranger_1.1.0    backports_1.4.1
##  [7] reprex_2.0.2        evaluate_0.19       highr_0.10
## [10] httr_1.4.4          pillar_1.8.1        rlang_1.0.6
## [13] googlesheets4_1.0.1 rstudioapi_0.14     rmarkdown_2.19
## [16] googledrive_2.0.0   bit_4.0.5           munsell_0.5.0
## [19] broom_1.0.2         compiler_4.2.2      modelr_0.1.10
## [22] xfun_0.36           pkgconfig_2.0.3     htmltools_0.5.4
## [25] tidyselect_1.2.0    fansi_1.0.3         crayon_1.5.2
## [28] tzdb_0.3.0          dbplyr_2.2.1        withr_2.5.0
## [31] grid_4.2.2          jsonlite_1.8.4      gtable_0.3.1
## [34] lifecycle_1.0.3     DBI_1.1.3           magrittr_2.0.3
## [37] scales_1.2.1        cli_3.5.0           stringi_1.7.8
## [40] vroom_1.6.0         farver_2.1.1        fs_1.5.2
## [43] xml2_1.3.3          ellipsis_0.3.2      generics_0.1.3
## [46] vctrs_0.5.1         tools_4.2.2         bit64_4.0.5
## [49] glue_1.6.2          hms_1.1.2           parallel_4.2.2
## [52] fastmap_1.1.0       yaml_2.3.6          colorspace_2.0-3
## [55] gargle_1.2.1        rvest_1.0.3         knitr_1.41
## [58] haven_2.5.1
```