

# Before the workshop

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Follow the instructions at the [R website](#) to download and install the most up-to-date base R version suitable for your operating system (the latest R version at the time of writing these instructions is 3.6.0).

Having RStudio is not absolutely necessary, but it will make life easier. RStudio is also available for different operating systems. Pick the open source desktop edition from [here](#) (the latest RStudio Desktop version at the time of writing these instructions is 1.2.1335).

This list of required packages might change, but it is a good start so that we won't waste precious minutes installing them.

```
pkgs <- c("bookdown", "detect", "devtools", "dismo",
  "Distance", "forecast",
  "glmnet", "gbm", "intrval", "knitr", "lme4", "maptools", "me4",
  "mgcv", "MuMIn", "opticut", "partykit", "pscl", "raster",
  "ResourceSelection", "shiny", "sp", "unmarked", "visreg")
to_inst <- setdiff(pkgs, rownames(installed.packages()))
if (length(to_inst))
  install.packages(to_inst, repos="https://cloud.r-project.org/")
devtools::install_github("psolymos/bSims")
devtools::install_github("psolymos/QPAD")
devtools::install_github("borealbirds/paired")
devtools::install_github("borealbirds/lhreg")
still_missing <- setdiff(c(pkgs, "bSims", "paired", "lhreg", "QPAD"),
  rownames(installed.packages()))
if (length(still_missing)) {
  cat("The following packages could not be installed:\n",
    paste("\t-", pkgs, collapse="\n"), "\n")
} else {
  cat("You are all set! See you at the workshop.\n")
}
```

Some prior exposure to R is necessary to get the most out of the workshop. You should be familiar with basic R object types and their manipulation, such as arrays, data frames, indexing, because this will not be covered as part of the course (although I will do my best to help). This preprint version of Norman Matloff's *The Art of R Programming* book gives a succinct introduction: <http://heather.cs.ucdavis.edu/~matloff/132/NSPpart.pdf>. Check out Chapters 1–6 if you want to brush up your R skills.

Please spend a few minutes to fill out this survey to give me an idea about topics you are more or less familiar with. This will help balancing the workshop material to best complement you existing skills and knowledge. Take the survey at: <https://forms.gle/r3jrUsTzN5o2q4VH7>.