# Introduction to R for Agrologists: April 11, 2015

This one-day course will introduce users to R software. This course is suitable for people who have never used R, as well those who may have used R in the past but need to brush up on the basics.

#### What is R?

R is an open source programming language and environment for data manipulation, statistical analysis, and plotting. In addition to being free (as in speech, eg. open source) it is also free (as in free beer, yay!), which means you can download and use it for free. It works on all major operating systems including Windows, Mac, and Linux.

### Course Content

- R basics including the R environment, basic data structures, and using functions
- Data input and output using .csv files
- Installation of external packages to extend R's capabilities
- Data manipulation using the "dplyr" package
- Plotting data using the "ggplot2" package
- Introduction to using R for statistical analysis

You will be issued a signed certificate of completion at the end of the course.

\*\*Note that this will not be a statistics course, but an introduction on how to use the program  $R^{**}$ 

## **Course Logistics**

Date and Time: Saturday April 11 2015, 9:00am to 4:00pm. Lunch and snacks will be provided.

Location: Stantec Consulting, 400A-2261 Keating Cross Road Saanichton, BC

You will need to bring a laptop computer with both R and RStudio installed. A course package including software installation instructions will be sent out prior to the course.

### Instructors

**Andy Teucher** is the analyst for the State of Environment Reporting program at the B.C. Ministry of Environment. He has been using R for almost ten years, and has authored and contributed to several R extensions (packages). He has taught two 2-day R workshops for Ministry of Environment staff, and is a certified instructor for Software Carpentry, an organization that teaches computing skills to scientists.

**Stephanie Hazlitt** is a biologist by training with over 15 years of data wrangling and analysis experience using many statistical packages. Stephanie earned her MSc in vertebrate ecology from Simon Fraser University and her PhD in population genetics from the University of Queensland, Australia. Stephanie currently heads up the State of Environment Reporting unit in the B.C. Ministry of Environment and is a regular R user.