# Chapter 5 Results: Related Results Section

Data Frames required:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2011 | 2012 | 2013 | ALL |
| Larvae FS | lfs2011 | lfs2012 | lfs2013 | lfsAll |
| Larvae FS Yr Pr | lfs1112 | |  |  |
| Larvae FS Yr Pr |  | lfs1213 | |  |
| Larvae FS Yr Pr | (part of 2013) |  | lfs1113 |  |
| L and A FS |  |  |  | lafsAll |
| L and A HS |  |  |  | lahsAll |
| L and Parents |  |  |  | lpAll2011-2013 |

Data Frames: n=10

Munge as part of related project

01MungeGeneticsData.R

02MungeLarvaSnpsByYearCombos.R

03MungeLarvalSnpsByYear.R

## Related.RMD (Perhaps eval once only)

Main = df name

Apply?

Call out (runRelated.R) part 1

Digest and Munge

Create selected df

Output file for related main.txt

Run related

Store Outputs - “relatedOutput” main

## Related Simulation. RMD (ie: eval once only)

Call out (runSimulation.R)

Store outputs [NB: Intensive – do once] “relatedSimOutput” main

Choose Cut-offs

Store Cut-offs –“simulationCutoffs” main

Call out (runCompareEstimators.R)

Store outputs [NB: Intensive – do once] “compareEstimators” main

## Family Plots.RMD

Load required output file, cutoffs and estimator comparison

load(“relatedSimOutput” main)

load(“simulationCutoffs” main)

load(“compareEstimators” main)

Plot cut-offs (density plot)

Show cut-offs

Plot estimates compared

Create Net

Create nodes

Create Links

Creat Net

Save Net

Plot family groups

Load Net

iGraph

Show

n

n families

## Parentals.RMD

Nominate Parents

Plot

**Variable Names:**

Data frames:

df (see table above)

dfList=c( lfs2011,lfs2012,lfs2013,lfsAll,lfs1112,lfs1213,lfs1113,lafsAll,lahsAll, lpAll)

qslMPeeliiForRelated (metadata – do not use larv)

CutOff:

urHs

hsFs

Related Algos

trioml

wang

lynchli

lynchrd

ritland

quellergt

dyadml

iGraph Inputs

edges (d= edge list (2 cols – additional cols are attributes eg color size etc)

vertices (vertices )

Colours

Years

2011 indianred

2012 lightgoldenrod1

2013 lightgreen

Fish

Larvae lightgreen

Adults cyan

Parents orange (if used)

Fathers light blue

Mothers -pink