# NOTES - Populations.pdf

## INVESTIGATION 1.2: 'A Sample Census - Wildlife on the Move'

- **population** - the total number of individuals of a single species that live in a designated region at a given time.

- ex: human population is ~ 7 billion

- **population density** - the number of individuals of a single species that live in each unit area ($km^2$, $mi^2$, hectare, acre) of habitat at a given time.

- ex: deer population is 6 deer per square mile

- **census** - a count of the population.

- **true census** - actual count of all of the individuals of a species in a given area.

- **sample census** - is an estimate of the population.

(used when actual count is not possible)

| **ESTIMATED POPULATION = Estimated Population Density x Area of Habitat** |
|---|

- The '**mark-return-recapture method**' is used to estimate population density.

  ex: DFO at Millerton and Cassillis estimate salmon populations on Miramichi River.

$$P = \frac{T_F T_L}{M}$$

P - estimated population

$T_F$ - total animals captured in first trapping

$T_L$ - total animals captured in later trapping

M - recaptured animals that are marked

# LAB: Mark-Return-Recapture

1.2 A Sample Census-Wildlife.doc

Lab - Mark_Return_Recapture.pdf

Lab Report - Mark_Return_Recapture.pdf

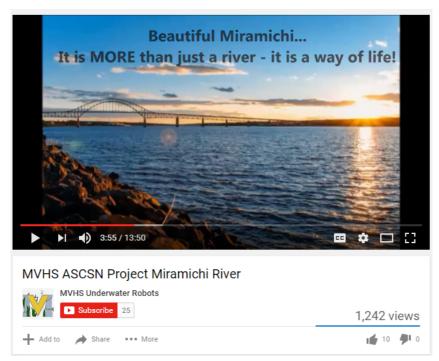### Classroom

### Field..Miramichi River



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**NOTES:**   - Only <u>1 lab report</u> needs to be passed per group.

- If you are absent, see me to make it up during IS.

- link is below for the extension question.

http://www.miramichisalmon.ca/northwest-miramichi-river-smolt-study/

**DUE:** By the end of class on Friday

Beautiful Miramichi...
It is MORE than just a river - it is a way of life!

3:55 / 13:50

MVHS ASCSN Project Miramichi River

MVHS Underwater Robots

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https://www.youtube.com/watch?v=hc0AD4v3n3Q

# Attachments

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