



Ariel White, Master's student

Mercury contamination and birds

Update: June 2005

*Dan Cristol and crew
Biology Department*



WILLIAM
& MARY

Sean Koebley
undergraduate



Objectives:

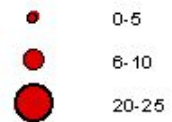
- **Compare reproductive success and health of birds in contaminated and less contaminated areas**
- **Determine level of mercury in feathers and blood**
- **Generate baseline diversity data**
- **Create training opportunities for W&M students**

Distribution of tree swallow boxes

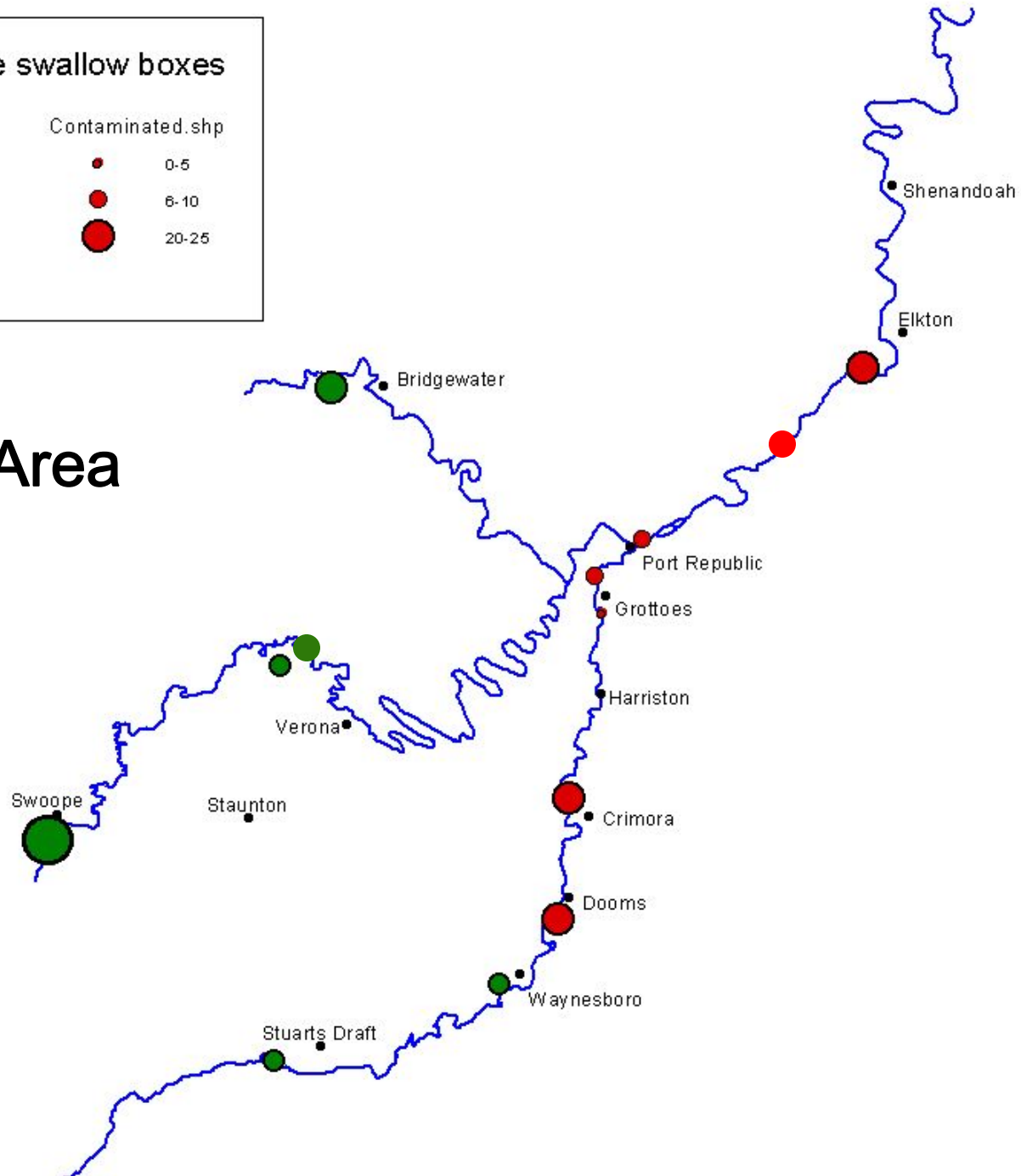
Noncontaminated.shp



Contaminated.shp

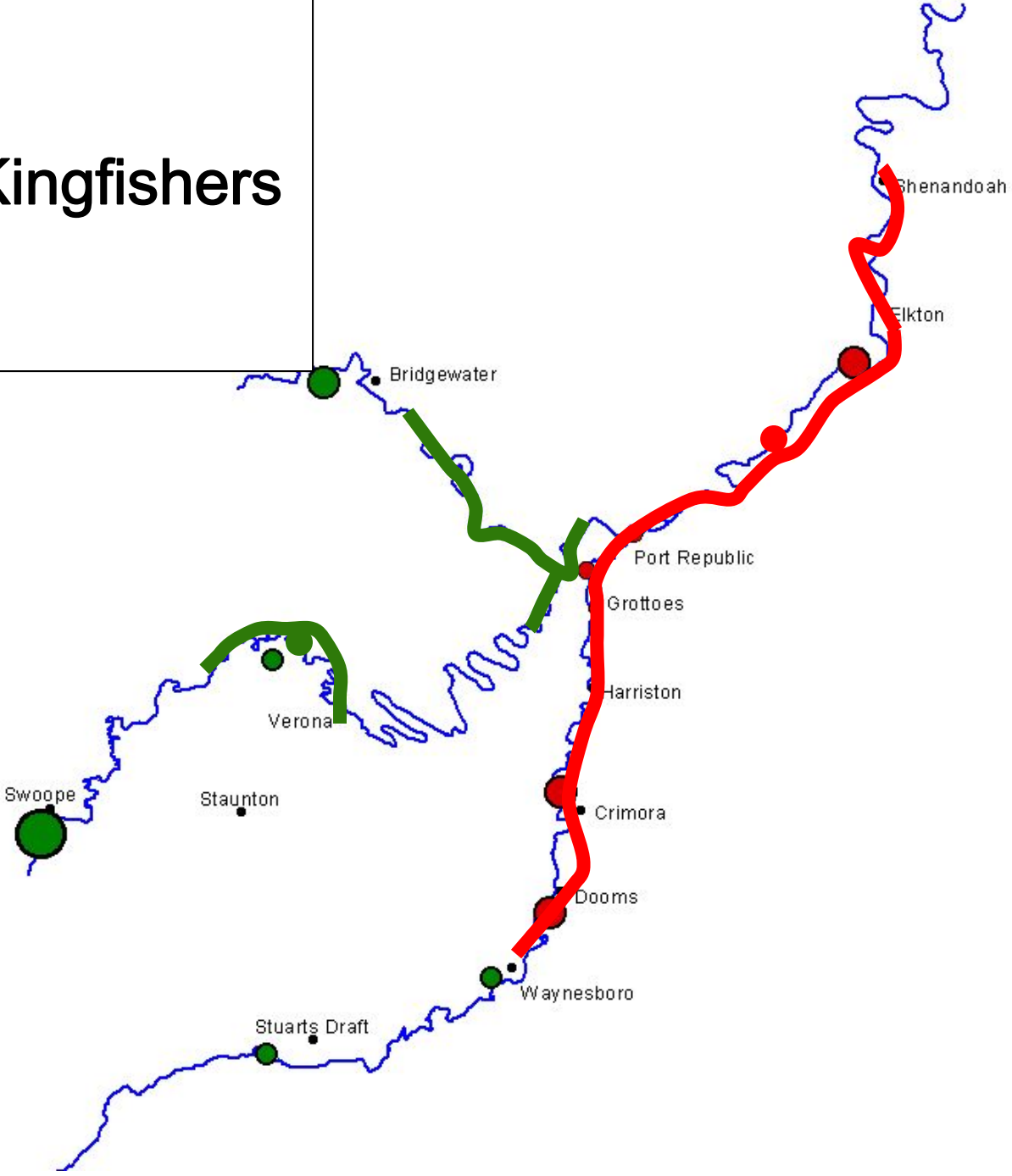


Study Area



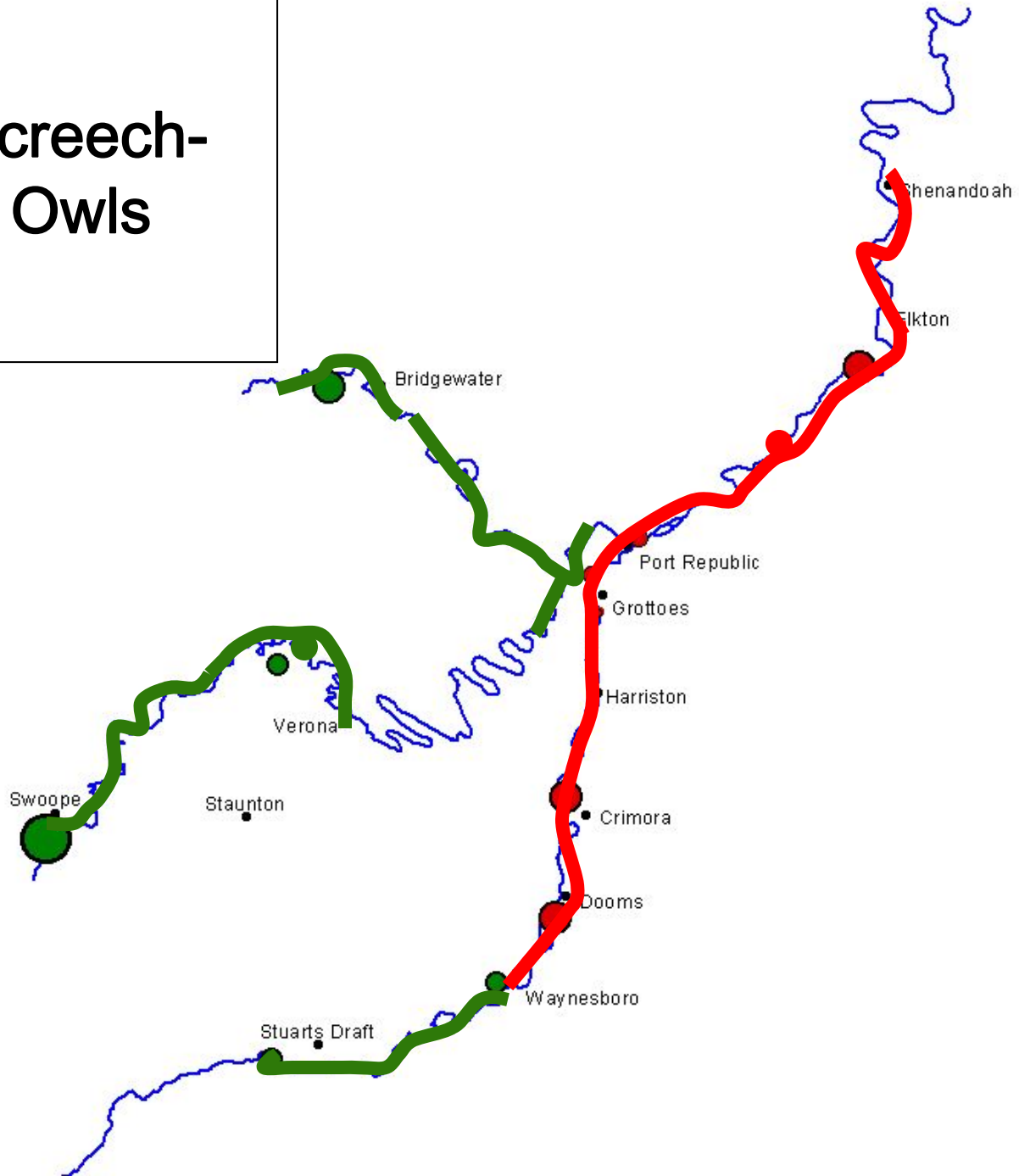


Kingfishers





Screech-Owls



“To Do” List for Year 1:

- ~~1. Erect all nestboxes by March 15~~
2. Diversity surveys Jun 15 – Jul 15
(Cristol, Ziegenfus, Spahr, Hamilton)
3. Nest success through July 30
4. Collect feathers and blood – Aug 15
5. Erect 100 swallow nestboxes – Sept. 1
6. Lab and statistical analysis ~Nov. 15?

Belted Kingfisher: Exceeding expectations!



*Oksana Lane from Biodiversity Research Institute
trained us May 23-27*

To date we have:

- captured and sampled 17 adults
- located ~15 active nests
- bled 36 nestlings (5 nests)

Tree swallow:

We have created a huge population of tree swallows



Rebecka Brasso
Master's student



To date we have:

- captured and sampled 64 parents
- 95 nests
- bled 36 nestlings – out of 570 that will all fledge before mid June!

Eastern Screech-owl:
Switch to Plan B

- 1 nest in 100 boxes – and it got eaten
- Switched to catching adults using nets and audio playback
- We have sampled 12 adults so far

Ravi Jefferson-George, undergraduate



Next update: blood Hg (total) levels
from 10 adults of each species

Following update: Comparison of
contaminated and uncontaminated,
adults and young, feathers and blood

