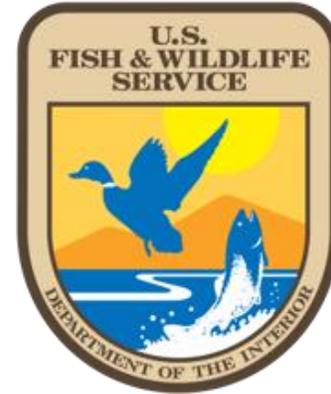


Visually sexing AMOYs

Lyn Brown, Abby May, & Erica Nol



Funding & Support





Why does sex discrimination matter?



Photo credit: Lydia Hansen

Sexing
Oystercatchers
– Knowledge to
Date



Visual sexing

Male

Female



Female

Male

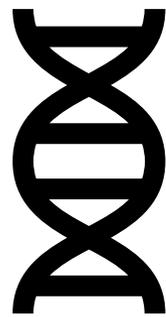




Allan Baker &
Erica Nol



Photo credit: Kate Goodenough



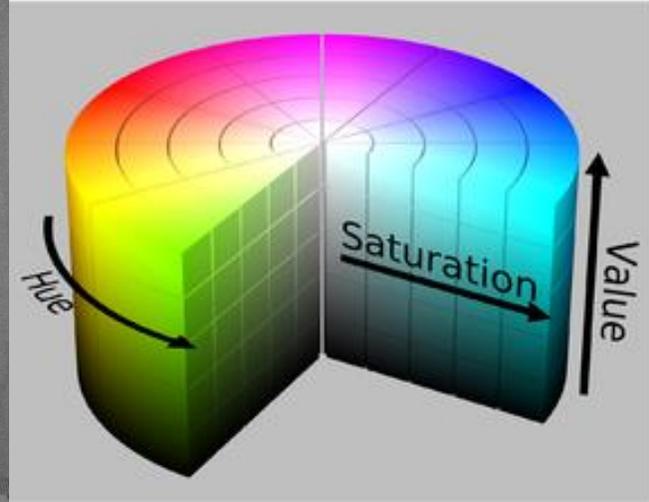
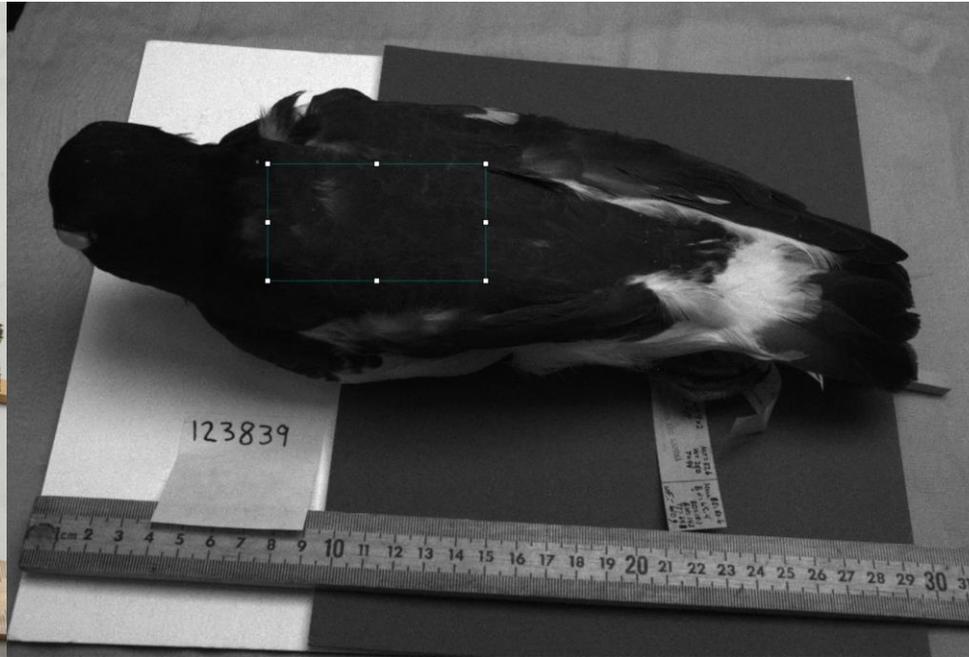
Skins





ImageJ

Image Processing & Analysis in Java



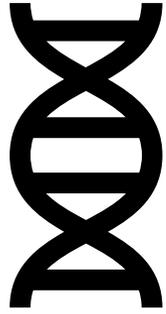
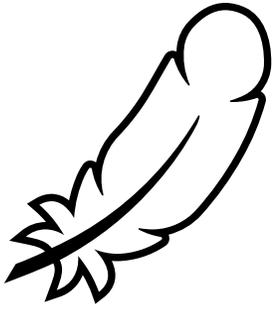
Male



Female

	Male	Female
Body mass	Smaller	Larger
Wing chord length	Smaller	Larger
Bill length	Shorter	Longer
Bill color	Darker and redder	Lighter and more orange
Back color	Darker	Lighter

N = 50



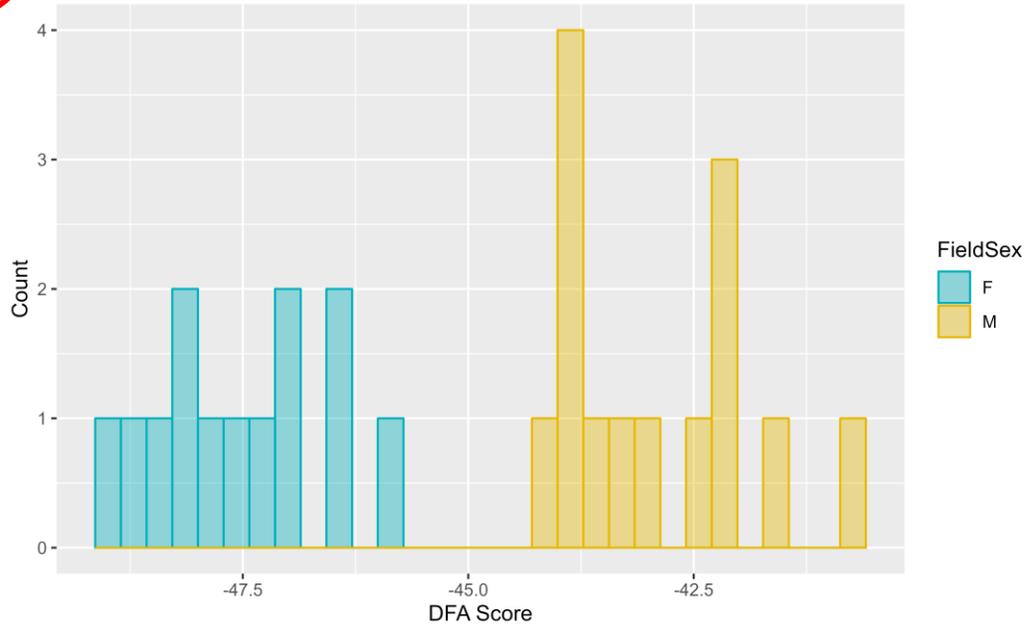
Classification Accuracy

98%

N = 27



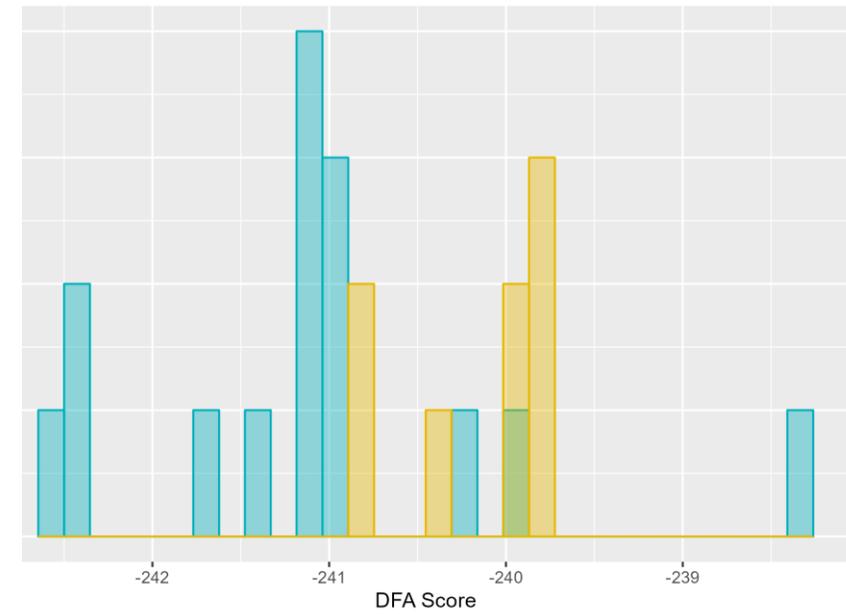
93%



N = 23

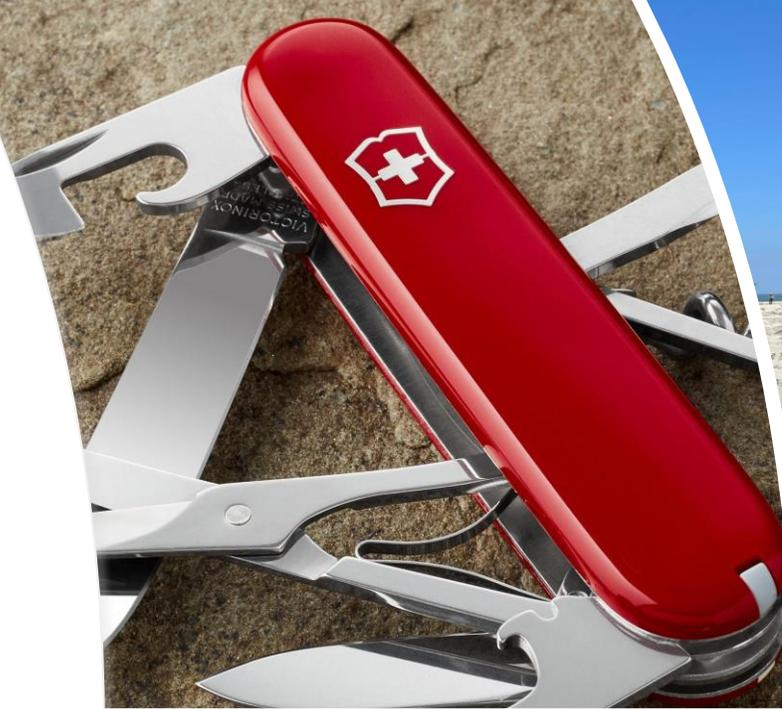


74%



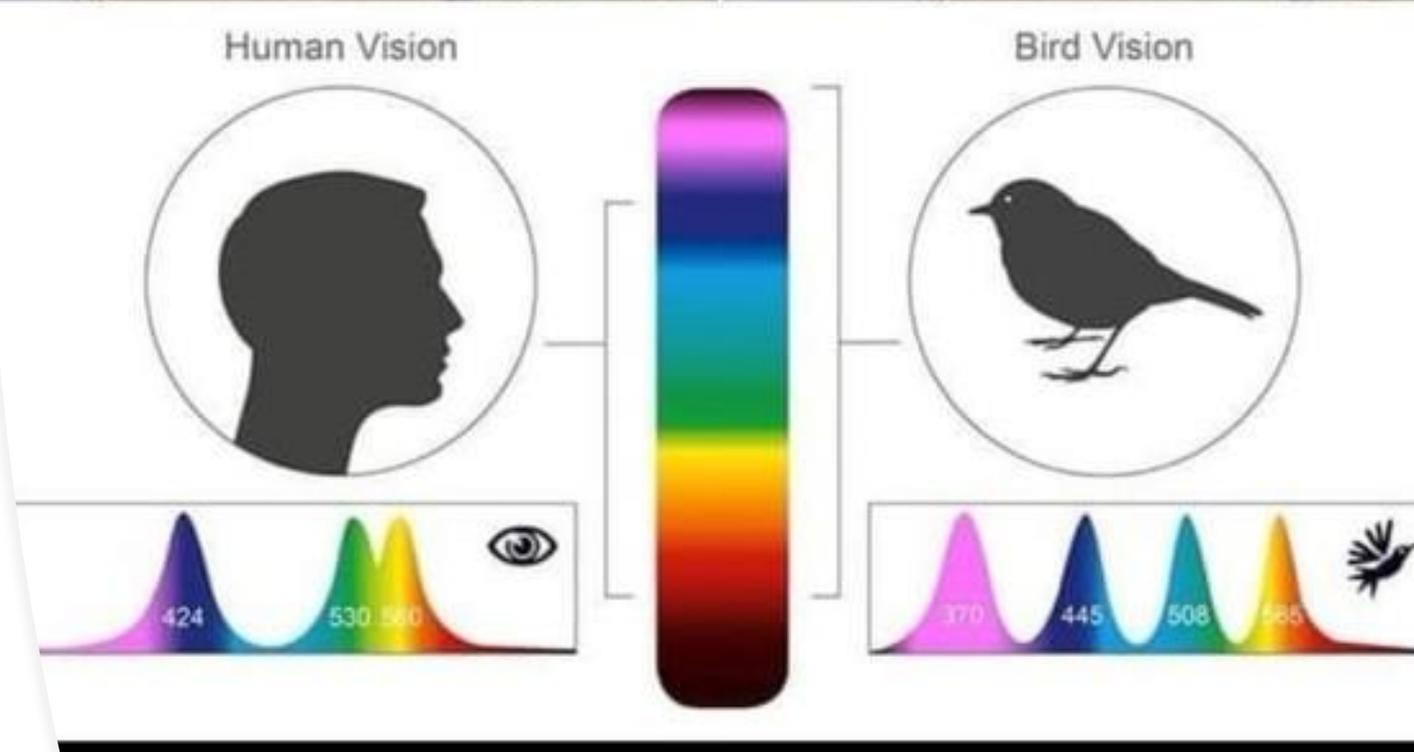
Advantages of visual sexing technique

1. Non-invasive
2. Immediate results
3. Cheap
4. High accuracy
5. Robust



Future research directions

- What the color differences means for the birds?
- Differences in avian colorspace – UV



Future research directions

- What the color differences means for the birds?
- Differences in avian colorspace – UV
- Transferability to other oystercatcher species



Thanks!

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