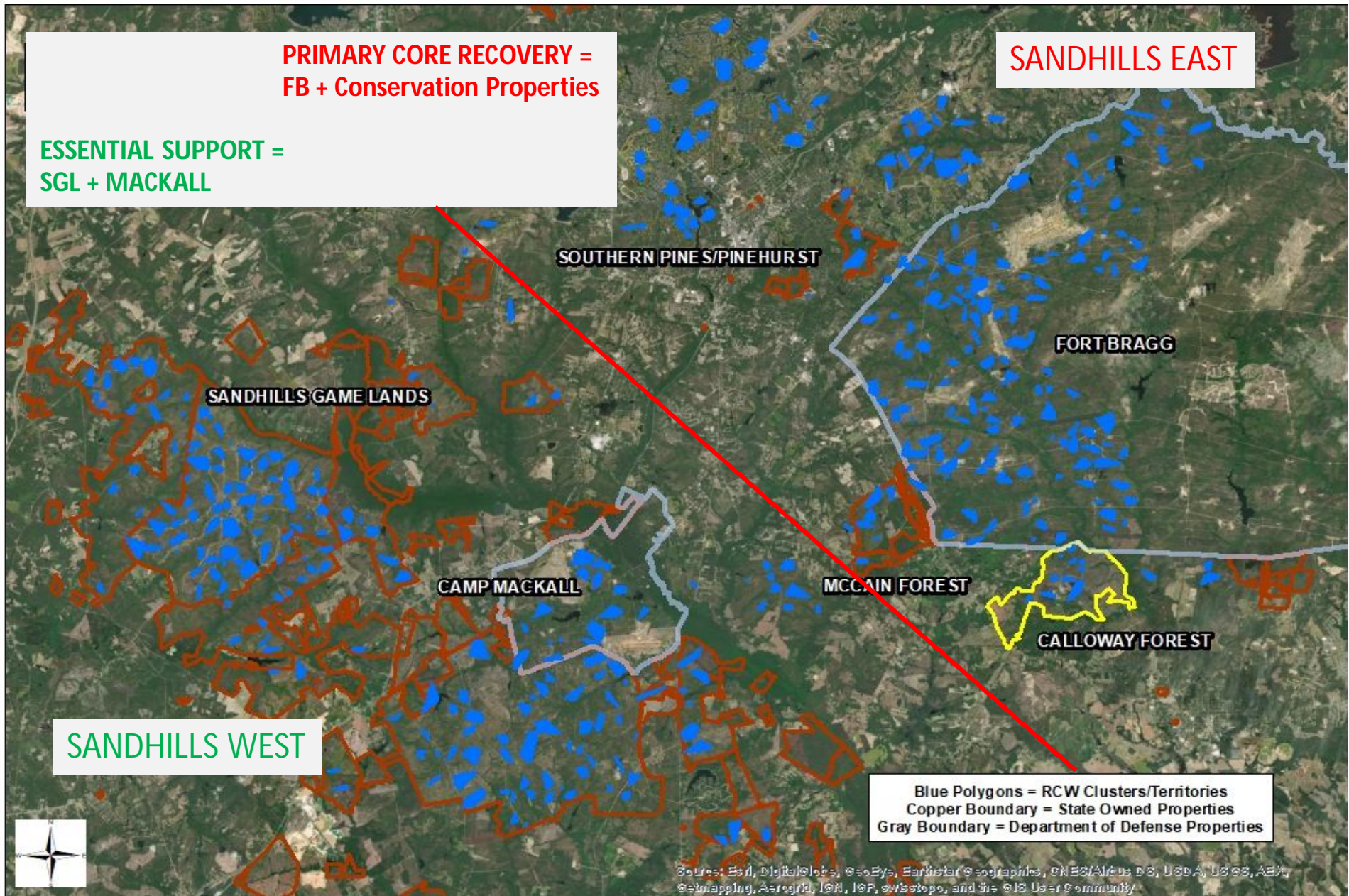


RCW RECOVERY WG UPDATE



- **2021 NC Sandhills Population Monitoring**
- **Fall / Winter 2021-22 Activities**
- **Avian Keratin Disorder**



NC SANDHILLS RCW STUDY AREAS



2021 Breeding Season Potential Breeding Group (PBG) Summary

SANDHILLS EAST

Fort Bragg (FB):

- Est. # PBG not yet determined on FB
- 1 new PBG on Western FB in 2021

CALLOWAY (no gain) _____ (11 PBG)

MCCAIN (no gain) _____ (8 PBG)

Southern Pines / Pinehurst (SOPI)

- PBG # (loss 8) _____ (38 PBG down from 46 in 2020)
- Walthour Moss Foundation (no gain) _____ (16 PBG)

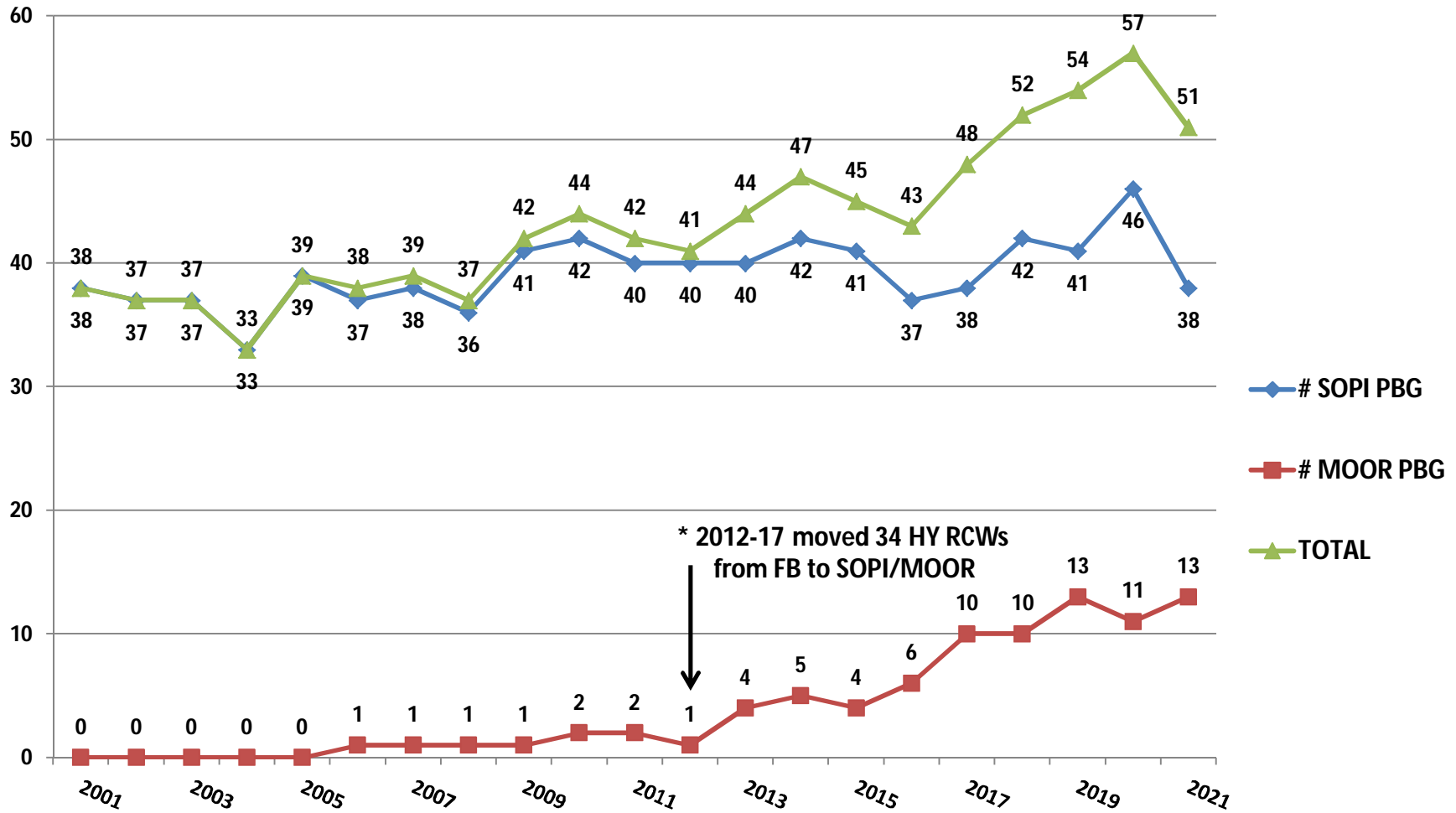
Western MOORE Co. + 2 PBG _____ (13 PBG)

WEYMOUTH WOODS SNP + 1 PBG Paint Hill _____ (4PBG)

RCW groups (PBG) within Sandhills East Private Lands 2001 – 2021

SOPI = Southern Pines/ Pinehurst

MOOR = Moore County



SANDHILLS WEST

SANDHILLS GAME LAND (SGL)

- SGL A-BLOCK (no gain?) _____PBG # not finalized
- SGL OUTER BLOCKS not assessed during 2021

CAMP MACKALL + 2 PBG _____(20 PBG)

BLUE + 1 PBG _____(10 PBG)

RCW CLUSTERS on Private Lands + Conservation Properties Cavity Management Fall / Winter 2021-22

Work amongst Partners and Private Land Owners

- Assess suitable cavities in Recovery (WEWO, CALLOWAY MCCAIN) and Safe Harbor Baseline Groups - add artificial cavities and restrictors as needed.
- Refurbish abandoned clusters or create new recruitment clusters where desired and spatially appropriate.
- SOPI: Whereas last year effort and funding secured specifically for Pinehurst Golf Courses No. 1 thru No. 9, target clusters to stabilize historic groups on the Country Club of North Carolina.

Avian Keratin Disorder (AKD)

in Red-Cockaded Woodpeckers



Normal



Longbill

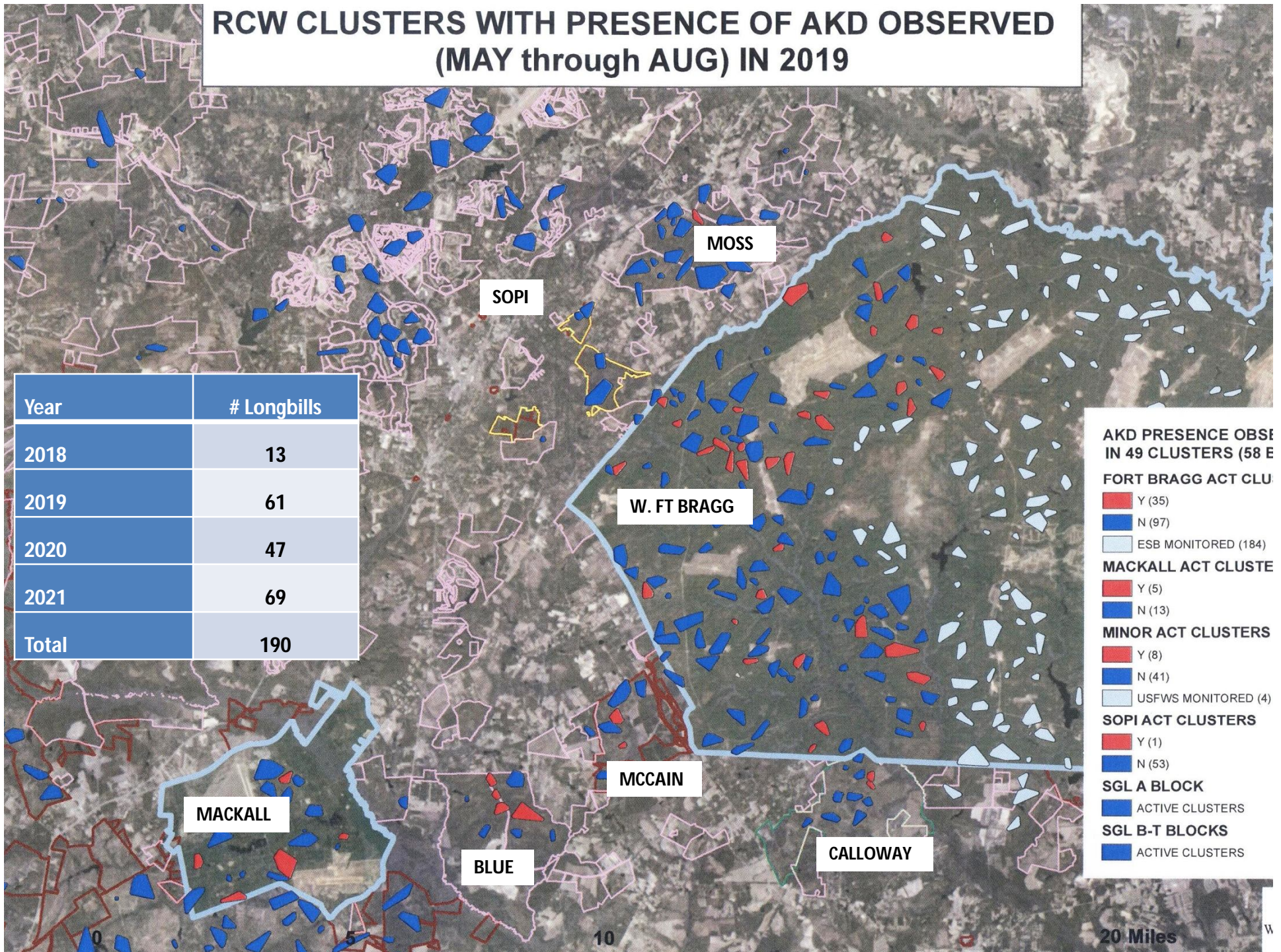
Majority of longbilled RCW observed have moderate AKD similar to middle example



Severe Longbill

Fewer cases of extreme elongation

RCW CLUSTERS WITH PRESENCE OF AKD OBSERVED (MAY through AUG) IN 2019



Total number of longbills observed by study area and year (2018-2021)

Area	2018	2019	2020	2021	Total
FB	8	44	32	47	131
MACK	1	4	4	9	18
MCCA	4	2	2	1	9
BLUE	0	4	4	1	9
SOPI	0	3	0	6	9
SGL	0	0	3	5	8
HOKE	0	4	2	0	6
Total	13	61	47	69	190

Total number of longbill sightings by month and year (2018-2021)

Month	2018	2019	2020	2021	Longbills
May	0	3	1	1	5
June	1	33	18	33	85
July	7	20	23	29	79
August	4	3	3	6	16
September	1	2	2	0*	5
Total	13	61	47	69	190

Morphometric RCW bill measurements

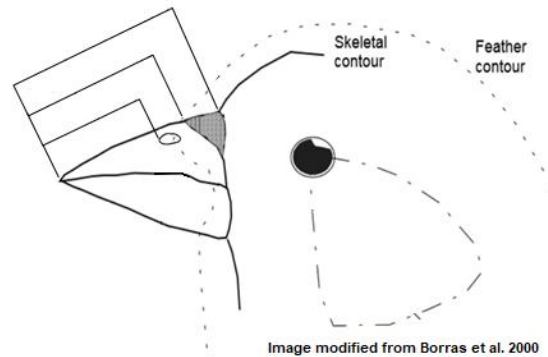
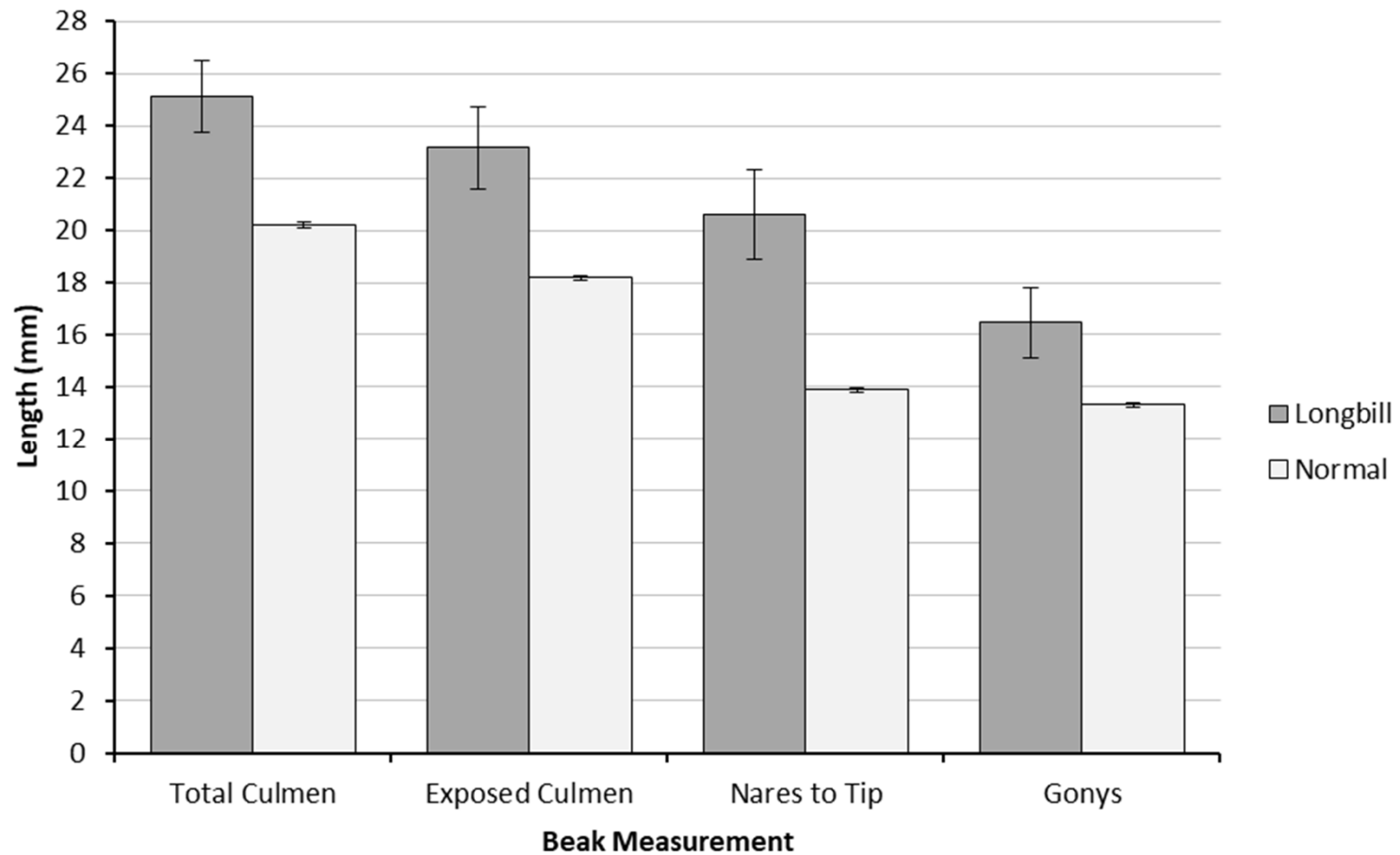
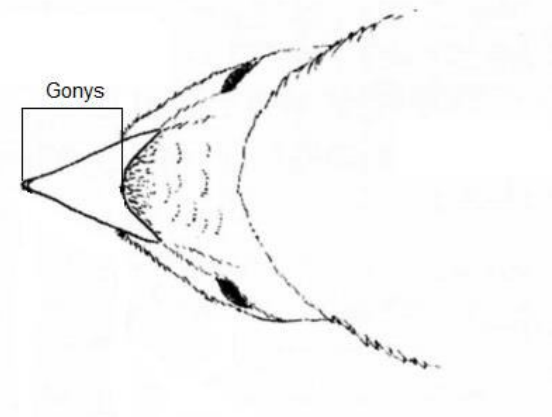


Image modified from Borras et al. 2000



FB Cluster 1016
9 Aug 2021



Photos J. McAllister



- **AKD seasonal phenomena-normal bill length returns through breakage and/or wear. Prevalence of condition may be under-represented.**
- **RCW biologists throughout species range alerted, though seemingly afflicting RCW only in the Carolinas, for now.**
- **2019 buccal /cloacal swabs tested negative for Poecivirus – USGS lab has 2nd more thorough screening for virus scheduled.**
- **Future work – possibly more swab sampling and examining impacts on the family group level.**