

USACE MONITORING OF PISCIVOROUS BIRDS IN THE COLUMBIA RIVER ESTUARY 2023 – RESULTS OF MONITORING AND DISSUASION EFFORTS

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AUTHORITY & SCOPE



East Sand Island :

2020 CRSO BiOp – O&M per Caspian Tern (CATE) Management Plan.

- Provide 1 acre of quality CATE habitat.
- Monitor CATE abundance and use of the colony
- Dissuade satellite colonies outside the 1 acre.

2020 CRSO BiOp – O&M per Double Crested Cormorant (DCCO) Management Plan.

- Provide quality DCCO habitat.
- Monitor to ensure there are no more than 5,939 breeding pair.

Rice, Miller Sands, and Pillar Rock Islands:

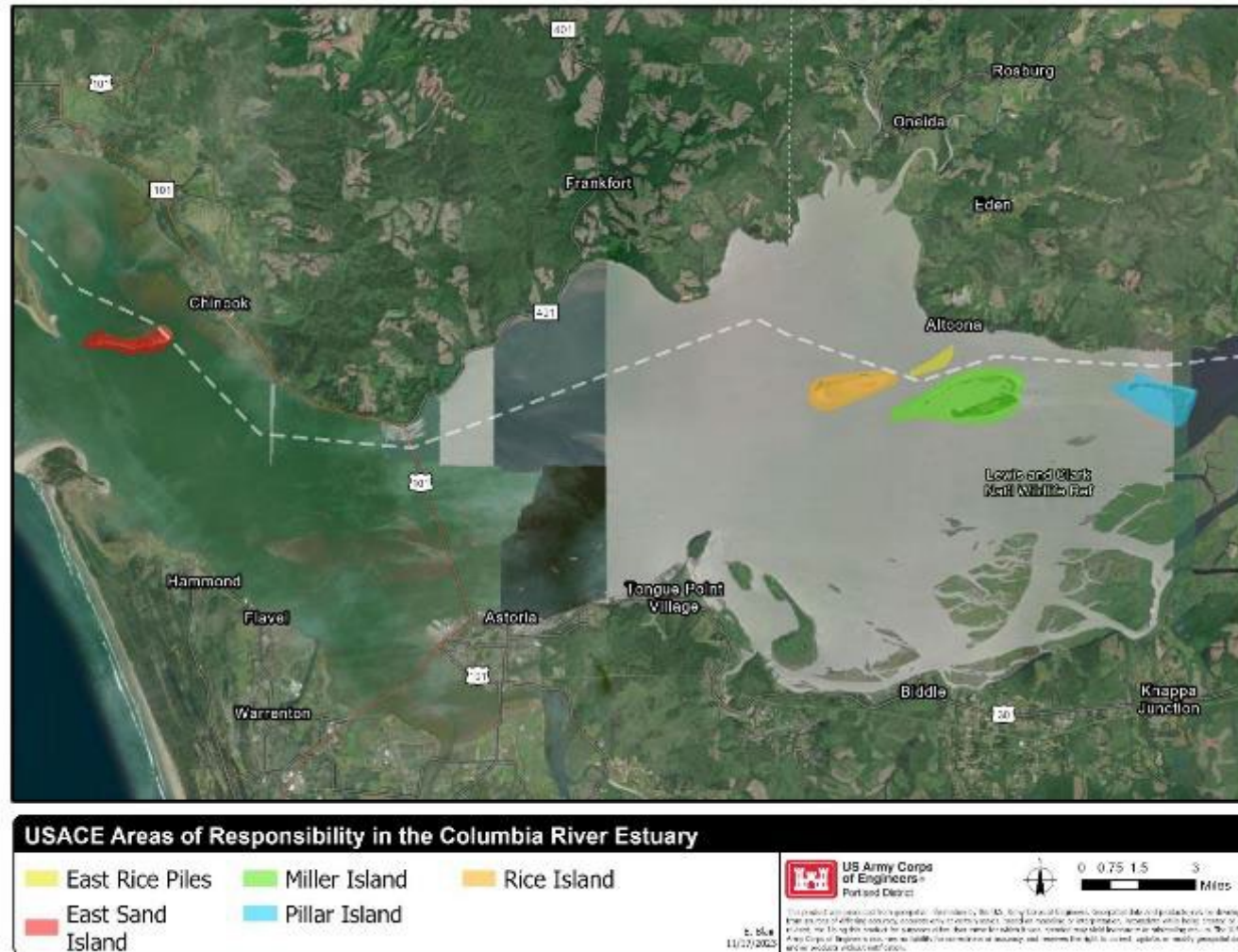
2012 Navigation BiOp – Deter piscivorous bird nesting attempts on dredge material islands.

- Monitor and deter all nesting attempts on Rice, Miller, and Pillar Rock islands.



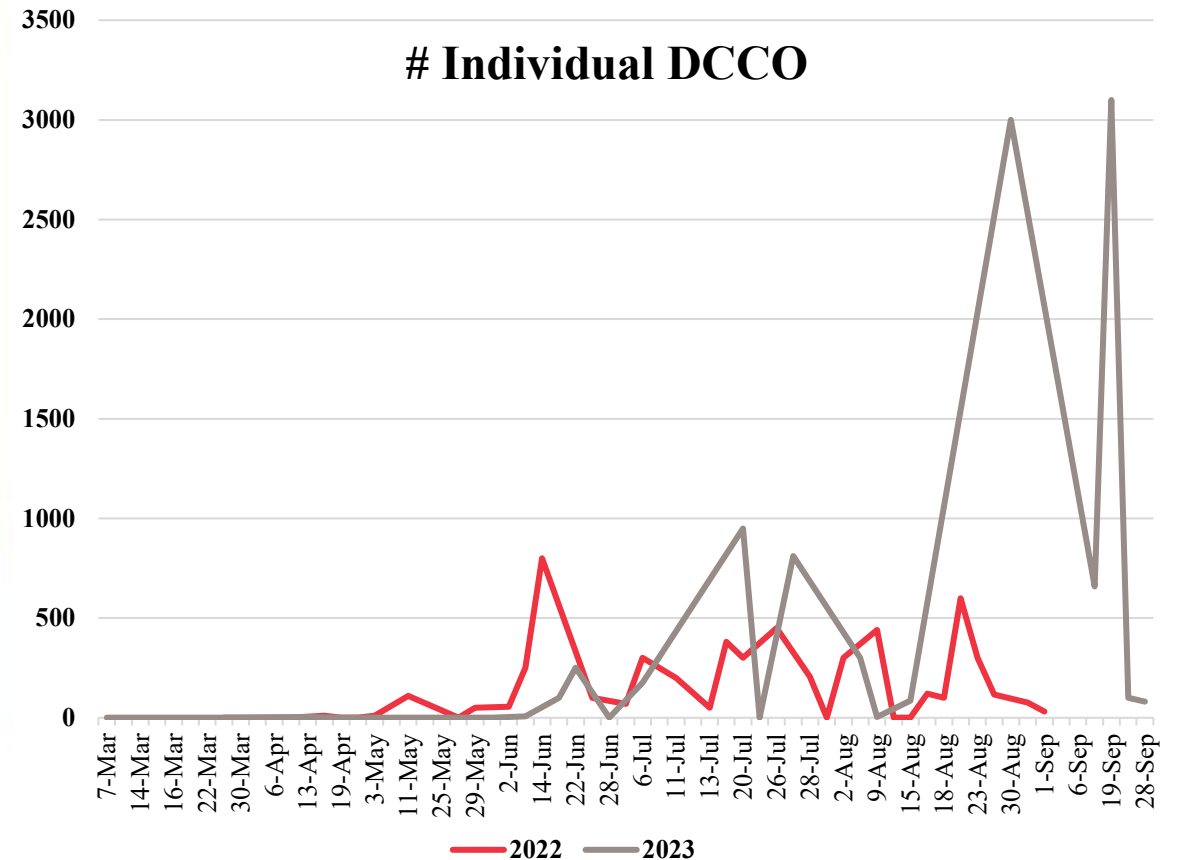
LONG TERM O&M OF USACE AVIAN ISLANDS

The management of USACE owned and operated islands in the Columbia River estuary is executed by the Fisheries Field Unit. This season we implemented avian monitoring and dissuasion to our full authority to satisfy the requirements of two BiOps (2020 CRSO and 2012 Navigation).



ESI: DOUBLE-CRESTED CORMORANT

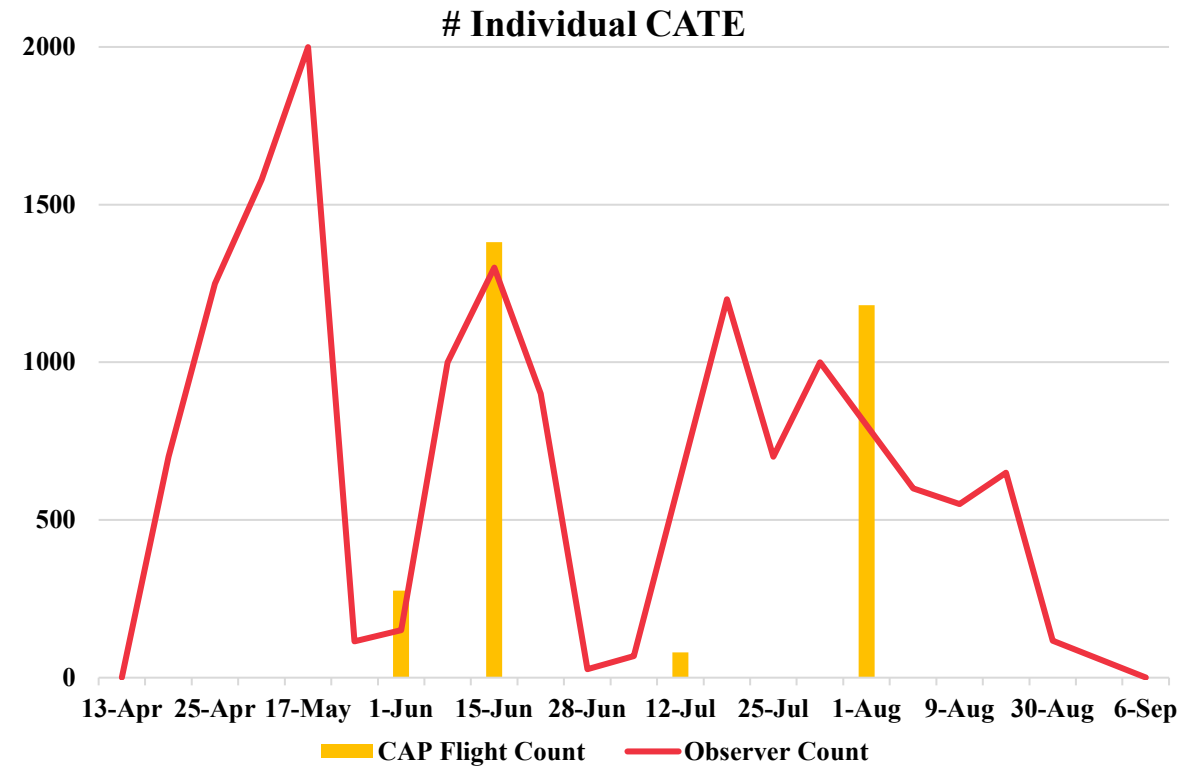
- DCCO PEAK ABUNDANCE: 3,100 INDIVIDUALS (19 SEPT.)
- 241 CONFIRMED NESTING ATTEMPTS
- SOME DCCO EGGS HATCHED ON ESI AND CHICKS FLEDGED
- PIT TAGS WERE COLLECTED



ESI: CASPIAN TERN



- CATE PEAK ABUNDANCE*: 524 BREEDING PAIR (15 June)
- COLONY ABANDONMENT
- NO EGGS HATCHED
- PIT TAGS WERE COLLECTED





RICE, MILLER, PILLAR ROCK ISLAND (RMP)





RMP: DOUBLE-CRESTED CORMORANT



DCCO Abundance, 4 April – 14 September.				
Site	<i>n</i> days monitored	$\bar{X} \pm \text{SD}$	Range	<i>n</i> days = 0
Rice Island	65	193.0 \pm 476.4	0-4898	29
Miller Sands	22	8.9 \pm 19.9	0-85	16
Pillar Rock Island	20	19.8 \pm 32.2	0-142	2
East Rice pilings	20	160.4 \pm 170.3	0-648	2



RMP: AMERICAN WHITE PELICAN



AWPE ABUNDANCE, 4 April – 14 September.				
Site	<i>n</i> days monitored	$\bar{X} \pm \text{SD}$	Range	<i>n</i> days = 0
Rice	65	36.0 ± 107.1	0-802	28
Miller Sands	22	52.2 ± 97.3	0-995	14
Pillar Rock	20	0.7 ± 3.1	0-14	19

RMP: CASPIAN TERN

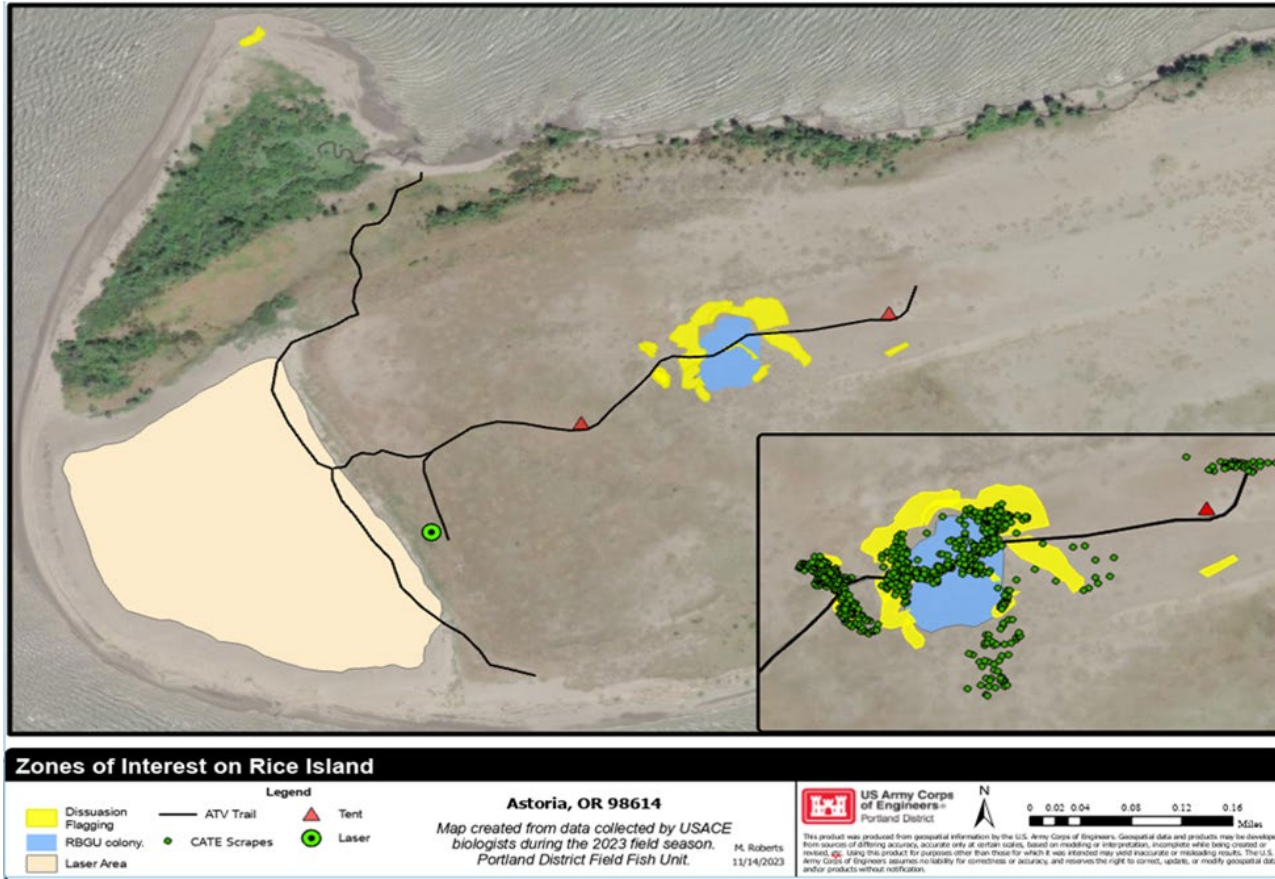


CATE Abundance, 4 April – 14 September.

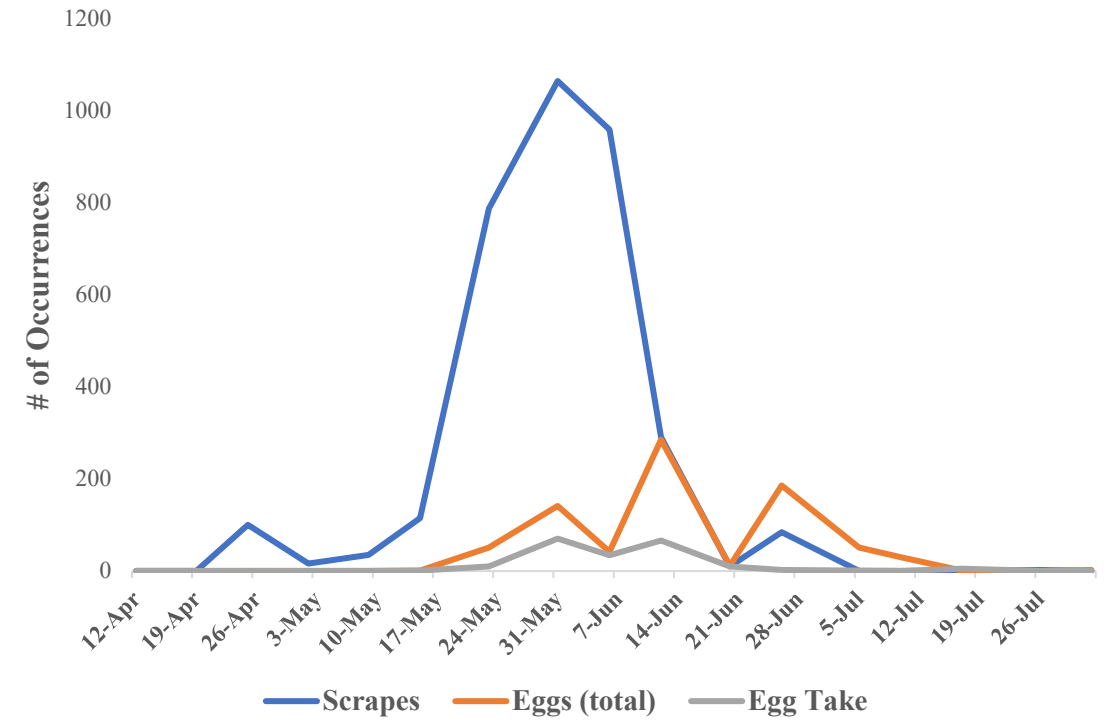
Site	<i>n</i> days monitored	$\bar{X} \pm \text{SD}$	Range	<i>n</i> days = 0
Rice Island	65	322.0 \pm 341.4	0-1360	3
Miller Sands	22	4.5 \pm 10.2	0-35	17
Pillar Rock Island	20	0	0	20

RICE ISLAND: CATE, RBGU, SHLA

- CATE PEAK ABUNDANCE: 1,360 INDIVIDUALS (JUNE 26)
- ASSOCIATION WITH RING-BILLED GULL: $n = 3,174$
- NO CATE EGGS HATCHED
- PIT TAGS WERE COLLECTED



CATE Nesting Behavior on Rice Island in 2023

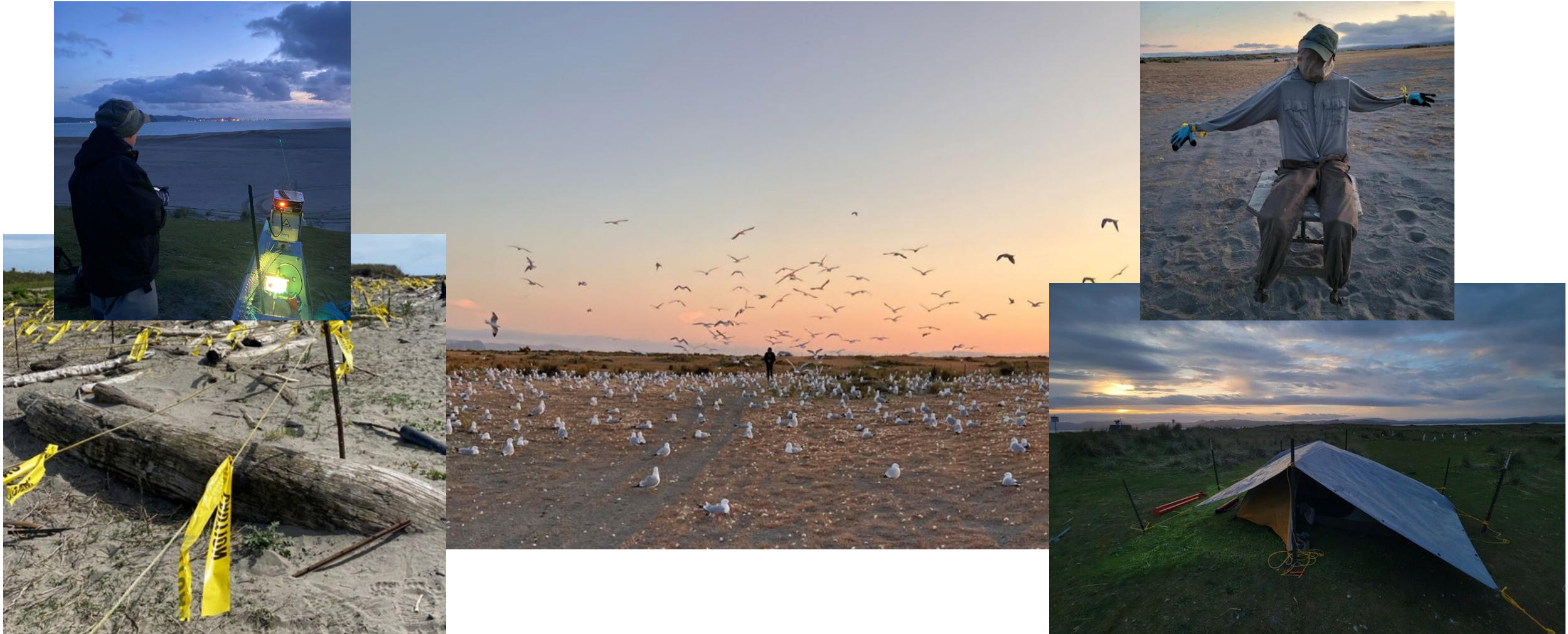




RICE ISLAND DISSUASION

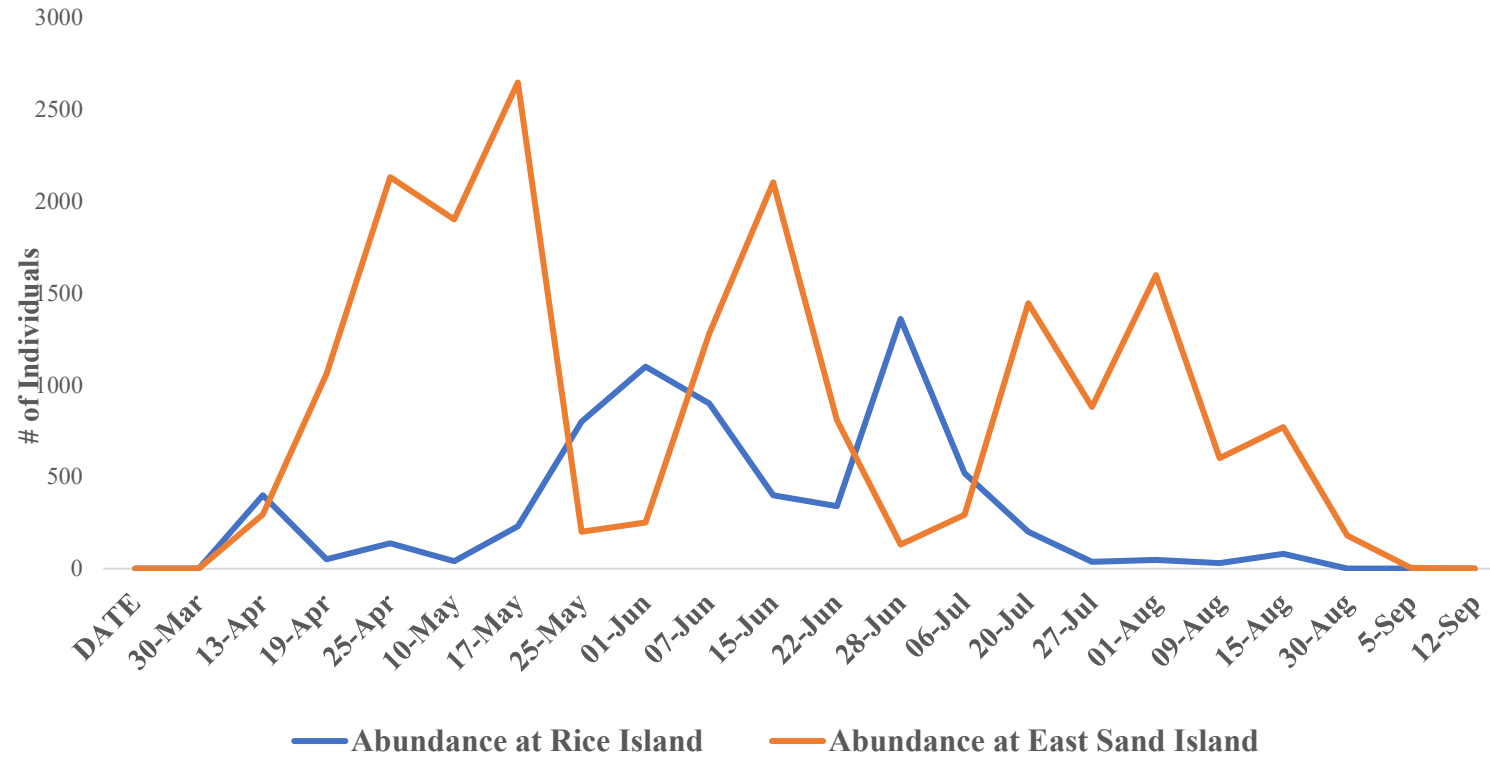


- **ENHANCED HAZING TACTICS**
- **65 DAYS MONITORING | 24 NIGHTS ON ISLAND**
- **SHLA CONSIDERATIONS | POPULATION SEEMINGLY UNAFFECTED**



CATE IN THE ESTUARY

CATE Abundance on Rice and East Sand Island in 2023





CLOSING REMARKS



- **Met management objectives and maintained compliance with BiOp requirements across all USACE owned and operated islands.**
Required intense dissuasion efforts by FFU staff.
- **Rice Island management of incipient CATE colony is dynamic and has an impact on fish..**
Continuing to pursue enhanced hazing tactics and increase staffing to fully implement authority.
- **CATE colony on ESI continues to decline and has not produced a chick in five years.**
Management of the birds and fish continues to be difficult.
- **DCCO colony on ESI continues to be inconsistent. The late season attempt was a success this year.**
Continue to manage land and prepare for birds to return.



QUESTIONS?



