



Stacie Robinson, PhD on behalf of Michelle Barbieri, DVM, MS NOAA Hawaiian Monk Seal Research Program

2021 Hawaiian Monk Seal Field Season

2021 NWHI Research & Recovery Activities

- Population assessment
 57 full surveys
- Individual marking
 135/171 pups tagged
- Vaccinations
- Interventions
- Release rehabilitated pup
- Debris collection support
- Partner project support
 (PSD MTBAP, USFWS, Surfrider)





Range-wide Population Update (2019)

2020: Insufficient data for total range-wide abundance

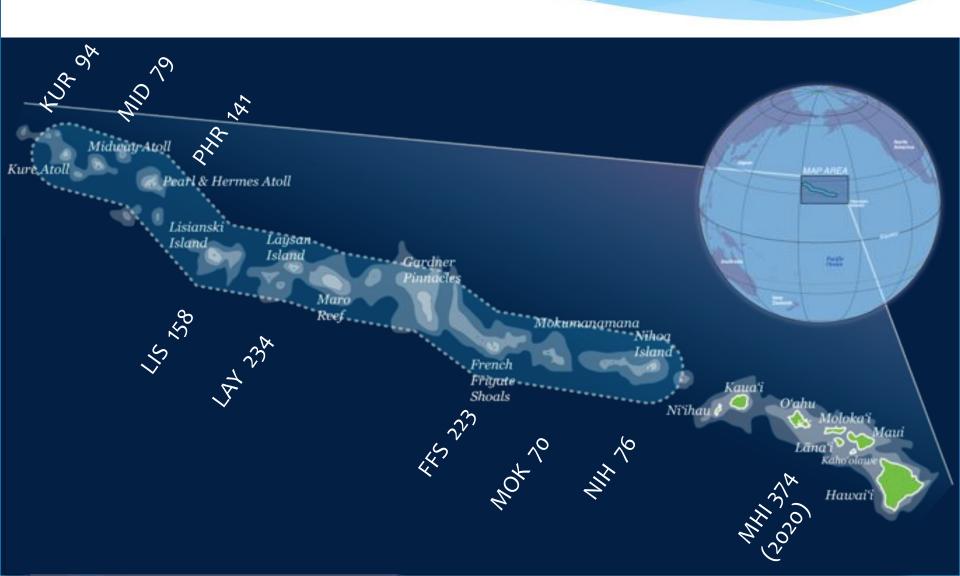
• 2020 MHI estimate = 374 (313, 434) seals

2019 range-wide population: 1428 (1361, 1520) seals

- Similar to 2018 (1429); confidence intervals overlap
- Overall positive trend, 2013-2019: Median estimated growth rate 2% per year

2021: Data analysis wrapping up; 171 pups born in NWHI

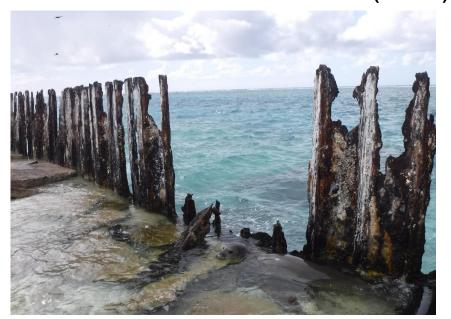
Range-wide Population Update (2019)



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24 Interventions

- 14 pups translocated from potential shark predation (Lalo)
- 1 seal released from entrapment at Lalo
- 6 disentanglements
- 2 seals treated with antibiotics for injuries (Manawai)
- 2 seals evaluated for care but released (Lalo)



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Rehabilitation: Ke Kai Ola

- Public-private partnership with The Marine Mammal Center
- 37 seals rehabilitated since 2014
- Seals primarily from NWHI
- 1 malnourished pup rescued from Kuaihelani, released Kapou





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Shark Predation Mitigation at Lalo

- No predatory behavior observed
- No documented pup disappearances (note: shorter and later season than usual)
- One Galapagos shark sighted off of Tern Is.
- 14 translocations (ceased August 20)
- Shark fishing: No triggers, no fishing



2021 Hawaiian Monk Seal Field Season

Ongoing Challenges at Lalo:

- Risks from degrading Tern Island infrastructure (destination site for translocated pups)
- Risks from sea level rise/habitat loss

Some good news: Improved juvenile condition and survival



Looking Ahead 2022 Season

2022 Assessment & Recovery Camps

- Deployment mission May; return Aug.
 - Monk seal & turtle camps
 - No seals currently in rehabilitation
 - First full length season since 2019
 - Second year including Huli 'la
 - Integrating seal camp with USFWS at Kapou (Lisianski)
- Kuaihelani (Midway): Seal surveillance during bait drops June-August



