

HMSRP Animal Handling Risk Assessment Tool (GAR Model)

Risk Factor	Risk Factor Category						Risk Level
	Very Low	Low	Medium	Medium High	High	Very High	
Resources: Equipment, PPE, Communication, Support, instruments, platforms	Minimal Resources	Standard Resources	Technical Resources	External Resources	Out of State Resources	Unavailable Resources	
	Basic PPE, no net, cell phone range	Basic PPE, Capture net, cell phone	Boat/jet ski, vhf/sat phone, de-hooking tools, specialized equipment	USCG, Air support, commercial transport.	Charter vessel, TMMC support	Missing a key resource to safely complete mission	
Environment: Land, in-water, remote, surf zone, slippery/jagged substrate, weather, proximity to other seals	Very Forgiving	Forgiving	Moderately Forgiving	Unforgiving	Very Unforgiving	Dangerous	
	Sandy beach, easy vehicle access, cool/overcast weather	Remote site, limited access, sandy beach with coral rubble	Off-shore islets, rubble beach, <15 knot winds, <3' seas	rocky landing, coral platforms, slippery substrate, 15-20 knot winds, 3-6' seas, other seals present	Surf landing, >20 knot winds, >6' seas, elevated air temperature	Heavy weather, coral tidepool, large rocks and boulders	
Team Selection & Fitness: Experience, training and familiarity, physical and mental fitness	Excellent Team	Very good Team	Appropriate Team	Marginal Team	Poor Team	Very Poor Team	
	Expert personnel that can do every aspect of the mission tasks/roles	Personnel expert in assigned roles	Majority of personnel expert in assigned roles. New staff in training or volunteers assisting, good team leader	New staff and/or volunteers assigned primary tasks. Team lead not experienced in task	Team leader with all new staff and/or volunteers. Need to ask public for help	No qualified staff on site. Directions are being given over the phone	
Seal Selection & Condition: Health Status, molt status, pregnant/nursing	Healthy	Healthy	Sick/Injured	Sick/Injured	Highly Compromised	No-touch	
	Weaned and juvenile seals	Sub-adult and adult seals	Entangled, external hooked, sick, injured, abscessed seal (all age class)	Injested hook, morbund, amputated, deep lacerations	Entangled/injested hooked pregnant or nursing or molt within 30 days	Pregnant or nursing, finished molt within 14 days	
Permission: Permit compliance, notifications, team agreement	Excellent	Very Good	Good	Marginal	Poor	Very Poor	
	Covered under existing permits	intra-agency coordination	vollunteer coordination	external agency coordination	Multiple permit, MOA, procurement	Not covered under existing permits, no MOA in place	
Mission Complexity: New or experimental, time sensitive, response or research, mission briefing	Standard	Standard	Moderately Complex	Complex	Very Complex	Extremely Complex	
	Population Assessment tagging weaned seals	Population Assessment tagging adult seals and re-tagging	Health and disease sampling, behavioral modification, public present	Instrumentation, translocation, contraversal public present	UAS, holding seal for more than 2 hours, rehabilitation, surgical procedures, euthanize	UME	

If a Risk level equals: Medium-High Contact project lead or immediate supervisor before proceeding.
≥High Contact Charles Littnan (808) 220-3601 or Michelle Barbieri (443) 834-8612 immediately.

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Key Considerations or questions to be asked

- Molt:** Seals that are less than 2-weeks past the completion of their molt will not be captured unless it is a lifesaving intervention. If this a seal is found with a new coat, but time of molt completion is unknown, then team will assume seal
- Pregnancy:** There will be no capturing of obviously pregnant females except for emergency interventions. If a seal is believed to be in its first trimester it can be captured. Outside of the first trimester capture should be avoided.
- Previous Capture History:** Does the seal have a previous capture history? If so were there any complications or concerns noted during that capture. If there is a record of past problems consult with veterinarian or program lead.
- Weather Concerns:** First assessment should be if weather (temperature, rain, other) poses a significant health threat to the seal or researchers (i.e. overheating etc.). If so, is there a way to mitigate using shades, water or other. Captures during the middle of the day should be avoided unless temperatures are cool or it is an emergency. No handling should occur during severe weather.
- Habitat Concerns:** Habitat should be assessed for hazards to seals or researchers. If it is a rocky platform with ledges or a bouldery habitat capture should be avoided unless absolutely necessary. If there are potential threats mitigate them where you can.
- Equipment Assessment:** Is all the gear necessary for the capture available, ready and functional? This includes sampling, handling, instrumentation, and emergency equipment. If you don't have something then consider not proceeding.
- Presence of other seals:** Are there other seals in the area that may be disturbed by the capture? Our goal is to minimize disturbing other seals in our research activities. The team should assess the relative importance of the activity versus the potential for disturbance. If you can catch the seal another time without disturbing animals consider postponing.
- Team Composition:** Do you have sufficient staff to safely handle the seal. If the response requires a veterinarian then you should have sufficient people to handle and sample while letting the veterinarian be free to monitor the seal. How experienced are the individuals on the team? Ensure that all staff understand their roles during capture, restraint, sampling and emergencies. Make sure they understand the warning signs to look for. If in doubt, don't capture the seal.
- Public Presence** Is the capture going to be in a particularly public area? If there is an expectation that there will be a large number of people ensure that you have sufficient people to help with crowd control and outreach. Consider a public briefing before and after the event. Expect to be videoed and behave accordingly.