

## Scientific Papers and Presentations on CRITTERCAM Research

### Papers:

- Seminoff, J.A., T.T. Jones, G.J. Marshall. (in prep) Activities of green turtles at a coastal feeding area described by turtle-borne video and data collection systems.
- Parrish, F., G. Marshall, C. Littnan, M.Heithaus, S. Canja, B. Becker, R. Braun and G. Antonelis. (2005). Foraging of Juvenile monk seals at French Frigate Shoals, Hawaii. *Marine Mammal Science* 21(1):93-107
- Reina, R. D., K. Abernathy, G.J. Marshall, and J.R. Spotila. (2005). Respiratory frequency, dive behaviour and social interactions of leatherback turtles, *Dermochelys coriacea* during the inter-nesting interval. *J. of Exp. Mar. Biol. and Ecol.* 316:1-16
- Littnan C.L., J.D. Baker, F.A. Parrish and G.J. Marshall. (2004). Effects of video camera attachment on the foraging behavior of immature Hawaiian monk seals. *Marine Mammal Science* 20(2):345-352
- Ponganis, P.J., R. Van Dam, D. Levenson, T. Knowler, K. Ponganis, and G. Marshall. (2003). Regional heterothermy and conservation of core temperature in emperor penguins diving under sea ice. *Comp. Biochem. and Physio.* Part A 135 (2003) 477-487
- Baird, R.W., B. Hanson, E. Ashe, M. Heithaus, and G. Marshall. (2003). Studies of foraging in “Southern Resident” killer whales during July 2002: Dive depths, burst in speed, and the use of a “Cittercam” system for examining sub-surface behavior. NMFS report AB133F-02-SE-1744
- Heithaus, M., J. McLash, A. Frid, L. Dill, and G.J. Marshall. (2002). Novel insights into green sea turtle behaviour using animal-borne video cameras. *J. Mar. Bio. Ass. U.K.* 82, 1049-1050
- Bowen, W., D. Tully, D.J. Boness, B.M. Buhleier, and G.J. Marshall. (2002). Prey-dependent foraging tactics and prey profitability in a marine mammal. *Marine Ecology Progress Series* 244:235-245.
- Parrish, F.A., K. Abernathy, G.J. Marshall, and B.M. Buhleier. (2002). Hawaiian monk seals (*Monachus schauinslandi*) Foraging in Deepwater Coral Beds. *Marine Mammal Science* 18(1):244-258
- Calambokidis, J., J. Francis, G. Marshall, D. Croll, M. McDonald, and T. Williams. (2001). Underwater behavior of blue whales using a suction-cup attached Cittercam. Annual report to Office of Naval Research for Grant Number N00014-00-1-0942.
- Heithaus, M.R., L.M. Dill, G.J. Marshall, and B.M. Buhleier. (2001). Habitat use and foraging behavior of tiger sharks (*Galeocerdo cuvier*) in a seagrass ecosystem. *Marine Biology.* 140: 237-248
- Heithaus, M.R., G. Marshall, B.M. Buhleier, and L.M. Dill. (2001). Employing Cittercam to study habitat use and behavior of large sharks. *Marine Ecology Progress Series* 209: 307-310.
- Parrish, F.A., M.P. Craig, T.J. Ragen, G.J. Marshall, B.M. Buhleier. (2000). Identifying diurnal foraging habitat of endangered Hawaiian monk seals using a seal-mounted video camera. *Marine Mammal Science* 16(2): 392-412.

Ponganis, P.J., R.P. van Dam, G. Marshall, T. Knowler, and D.H. Levenson. (2000). Sub-ice foraging behavior of emperor penguins. *The Journal of Experimental Biology* 203: 3275-3278.

Williams, T.M., R.W. Davis, L.A. Fuiman., J. Francis, B.J. Le Boeuf, M. Horning, J. Calambokidis, and D.A. Croll. (2000). Sink or Swim: Strategies for Cost-Efficient Diving by Marine Mammals. *Science* 288: 133-136.

Marshall, G.J. (1998). Crittercam: an animal borne imaging and data logging system. *Journal of the Marine Technology Society* 32: 11-17.

### **Presentations:**

Elia Y.K., Herman; L.M. Herman; A.A. Pack; G. Marshall, M. Bakhtiari, P.L. Greene, J. Delarue, S. Terna, C.M. Shermard, D. Cheung, J. Tweedy III, A. Bendlin. Exploring the Humpback Whale Mating System Using CRITTERCAM. *Oral at 16<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. San Diego, California.*

Abernathy, K., Adimey, N., Powell, J., Gaspard, J., Marshall, G., Colbert, D. (2005) The Feasibility of CRITTERCAM on West Indian Manatees. *Poster at 16<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. San Diego, California.*

Marshall, G., Beier, L., Rasch, D., Bakhtiari, M., Heithaus, M. (2004) CRITTERCAM: First Use of Animal-Borne imaging for direct observation of brown bear behavior and ecology in a temperate rainforest of Alaska. *Oral at 15<sup>th</sup> Conference of International Bear Research and Management. San Deigo, California.*

Adimey, N., Abernathy, K., Gaspard, J., Colbert, D., Powell, J., Littlefield, J., Marshall, G.. (2003) Feasibility of CRITTERCAM on West Indian Manatee. *Poster at 15<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Greensboro, North Carolina.*

Sharpe, F., Heithaus, M., Dill, L., Buhleier, B., Marshall, G., Folkens, P.. (2003) Variability in Foraging Tactics and Estimated Prey Intake by Socially Foraging Humpback Whales in Chatham Strait, Alaska. *Oral at 15<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Greensboro, North Carolina.*

Littnan, C., Parrish, F., Baker, J., Marshall, G. (2003) Assessment of Immature Hawaiian Monk Seals: Foraging Behavior, Habitat Use and Prey Type Using CRITTERCAM. *Oral at 15<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Greensboro, North Carolina.*

Calambokidis, J., Oleson, E., McDonald, M., Burgess, B., Francis, J., Marshall, G., Bakhtiari, M., Hildebrand, J. (2003) Feeding and Vocal Behavior of Blue Whales Determined through Simultaneous Visual-Acoustic Monitoring and Deployment of Suction-Cup Attached Tags. *Oral at 15<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Greensboro, North Carolina.*

Baird, R.W., McSweeney, D.J., Heithaus, M.R., Marshall, G.J. (2003) Short-Finned Pilot Whale Diving Behavior: Deep Feeders and Day-Time Socialites. *Oral at 15<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Greensboro, North Carolina.*

Marshall, G., Frank, L., Rasch, D.. (2003) CRITTERCAM: Animal-Borne Imaging in Field Science. *Oral at 83<sup>rd</sup> Annual Meeting of the American Society of Mammalogists. Lubbock, Texas.*

- Francis, J., J. Calambokidis, M. Bakhtiari, G. Marshall, M. McDonald, T. Williams, D. Gendron, and D. Croll. (2001). Deployment of an instrument package to film and record underwater behavior of blue whales. *Oral at 14<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Vancouver, British Columbia.*
- Reina, R., Abernathy, K., Marshall, G. J., and Spotilla, J. Crittercam Reveals Gluttony, Sex and Violence In the Leatherback Underworld. (2001) *Oral at the 21<sup>st</sup> Annual Symposium on Sea Turtle Biology and Conservation, Philadelphia, PA*
- Seminoff, J. Homorange and Local Movements of the East Pacific Green Turtle (*Chelonia mydas agassizii*) at a Gulf of California Feeding Area. (2000) *Oral at the 20<sup>th</sup> Annual Symposium on Sea Turtle Biology and Conservation, Orlando, FL.*
- Bowen, W.D. (1999) Marine Mammal Foraging Ecology: Measurement, Scale, and Life History. *Plenary Address 13th Biennial Conference on the Biology of Marine Mammals, Maui, Hawaii.*
- Parrish, F.A., Craig, M.P., Abernathy, K., Marshall, G.J., and Buhleier, B.M. (1999) Use of Deepwater Coral Beds by Monk Seals at French Frigate Shoals, Hawaii. *Oral at 13<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Maui, Hawaii.*
- Parrish, F.A., Craig, M.P., Ragen, T.J., Marshall, G.J. and Buhleier, B. (1998) Foraging Habitat of the Adult Hawaiian Monk Seal at French Frigate Shoals, Hawaii.. *Oral at 12<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Monaco*
- Craig, M.P., Parrish, F.A., Ragen, T.J., Marshall, G.J. and Buhleier, B. (1998) Underwater Behavior of Adult Male Hawaiian Monk Seals Instrumented with CRITTERCAM. *Poster at 12<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Monaco.*
- Boness, D.J., W. D. Bowen., G.J. Marshall, and B. Buhleier. (1995). Reproductive behavior of harbor seal males at sea. *Oral at 11<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Orlando, Florida.*
- Schwartz, M.K., Boness, D.J., Marshall, G.J., Buhleier, B. (1995) Male Harbor Seal Visual and Acoustic Underwater Displays. *Poster at 11<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Orlando, Florida.*
- Marshall, G.J. (1989). Development of a video-collar to study aquatic fauna: a view from the animal's back. *Proceedings of the Ninth Annual Sea Turtle Biology and Conservation Ecology Symposium.*