

# In Memoriam: Stuart Innes, Ph.D.

5 May 1953 - 21 May 2000

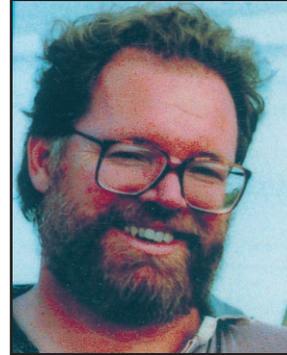
As I write this, it is just days short of two years since Stuart died in a helicopter crash on the sea ice near Resolute Bay, Nunavut.

In the spring of 2000, Dr. Stuart Innes of the Department of Fisheries and Oceans, Canada (DFO), with friend and colleague Dr. Malcolm Ramsay, of the University of Saskatchewan, embarked on a newly developed collaborative work on the interactions of polar bears (*Ursus maritimus*) and ringed seals (*Phoca hispida*). Although they were internationally respected researchers, Stu in marine mammalogy and Malcolm (Messier 2000) in polar bear ecology, they still approached arctic research with the exuberance of two kids in a candy shop. Conversations with Stuart that spring and the field-notes he left behind attest to the enthusiasm and energy they shared for their work together. Sadly, Stu and Malcolm also died together. That it should all end so abruptly and prematurely continues to affect those they left behind.

Stuart had been studying ringed seals for several years and was especially interested in how they use their environment, particularly during the critical pupping season. He attached sonic tags to some to track their movements under the fast ice. He acquired and trained a team of canine colleagues (five at last count) to sniff out seal lairs so he could map their distribution with respect to ice formations. In addition to the biological detectors (dogs), Stuart investigated the use of technology in the form of airborne and satellite radar imagery to classify and map ringed seal habitat (Nichols *et al.* 1998).

Stuart's research was not limited to ringed seals and habitat use. His marine mammal research ranged from manatees (*Trichechus manatus*) in South America (~7° N) to ringed seals at Eureka, Nunavut (80° N) and from harp seals (*Pagophilus groenlandicus*) in the White Sea, Russia (~40° E) to beluga (*Delphinapterus leucas*) in the Beaufort Sea, Northwest Territories (~140° W) (Furgal *et al.* 1996, Harwood *et al.*

1996, Chernook *et al.* 1998, Stewart *et al.* 1998), with others in between (*e.g.* Worthy *et al.* 1987, Hanson *et al.* 1995, Goodyear 1999, Cosens and Innes 2000). He also studied terrestrial species, including: grey squirrels (*Sciurus carolinensis*, Innes and Lavigne 1979) and beaver (*Castor canadensis*, Innes 1989), and he took more than a passing interest in mustelids and sharp-tail grouse (*Tympanuchus phasianellus*). Throughout his career Stu examined population dynamics, from the large picture of population size (*e.g.* Lavigne *et al.* 1979, 1980, 1982, Innes *et al.* 2002, Innes and Stewart 2002) to the details of individual energy expenditures that contribute to a population response (Innes 1985, Innes *et al.* 1981 1986, Lavigne *et al.* 1985).



Stuart enjoyed the sharing of knowledge and, over the years, he held faculty positions or adjunct status with several different departments at three universities. He directly supervised two M.Sc. theses and was a key advisor on many more graduate committees at the universities of Guelph, Waterloo and Manitoba. Stuart was also an enthusiastic participant at many workshops and on numerous scientific committees. While he had over 20 primary publications to his credit (see Stewart and Lavigne 2001), he produced many more research documents and working papers for discussion at national and international meetings. My quick count produced over 40 titles, just in the 11 years he was with DFO. While time spent on these works took away from time that might have been spent on primary publications, these meetings were often the venue for making key management decisions for marine mammal populations. Stu could hardly have applied his talents better to DFO's mandate and the concerns of our co-management partners.

Inuit co-management partners were a large part of Stuart's endeavours with DFO. He worked hard to learn some Inuktitut. When there were conflicting perspectives around marine mammal issues, he tried to understand the underlying world-views held by Inuit to accommodate them in the scientific realm. For example, as part of a committee to develop a management plan for beluga (Planning Committee for the Co-management of Southeast Baffin Beluga, 1994), Stuart noted that discussions about "beluga management" were not about altering beluga but about changing the behaviour of humans. This alleviated some local concerns and is consistent with a scientific approach to manage the use of a resource, not the resource itself. At the same time, Stuart helped the Inuit of Pangnirtung design a scientifically credible study to assess their community-based management plan for beluga hunting, including management modifications that would result from any of the possible results of the study.

Stuart's professional life often intermingled with his personal life. He treasured his dogs (3 breeds of retrievers) equally for their professional expertise in his ringed seal research, their shared enthusiasm for hunting grouse (*Bonasa umbellus* and *T. phasianellus*), and their companionship in the field and at home. He pursued his recreation with the same passion and attention to detail that he applied to his research. Stu knew the genetic background of the flowers and

vegetables he grew and shared. He hunted moose (*Alces alces*) and deer (*Odocoileus virginianus*) and was as familiar with the scientific literature on those species as he was with that dealing with marine mammals. He shared his wonder at the world and his understanding of it with colleagues, students and friends alike. However, Stuart could also separate his professional and personal views completely. It was commonplace for a heated discussion at a scientific workshop to be followed by a congenial evening of fellowship, with Stuart leading the way.

When I think of Stu, I think of his eagerness of mind and generosity of spirit. There was never a shortage of topics to debate at a workshop, over supper, or while walking a grouse trail together. His sometimes-brusque demeanour masked compassion and loyalty so there was never a shortage of anything if Stu knew of your need. To commemorate these aspects of Stuart's personality, friends and colleagues have established a bursary to help young student researchers attend the biennial meetings of the Society for Marine Mammalogy. Contributions may be sent to: the Stuart Innes Memorial Fund, c/o the Staff Association, Department of Fisheries and Oceans, Freshwater Institute, 501 University Crescent, Winnipeg, Manitoba, R3T 2N6, Canada.

**R.E.A. Stewart**

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