

Honoring U. S. Seal, a Father of Modern Zoo Conservation Science

On April 9, 2002, many of the close friends and associates of Dr. U.S. Seal, Chairman of the Conservation Breeding Specialist Group, were saddened and shocked to receive a letter from Ulie relating details of what could be called a massive "health crash". The letter stated that Ulie was diagnosed with a metastatic large cell adenocarcinoma of the lung with several metastases to the brain. Treatment was to be investigated but it was clear to Ulie that his time on the planet might be limited. Typical of him, he began a very systematic process of taking care of business, to insure that many of the people and things he loved most would be able to continue doing what they loved. These were, of course, his family members who include not just blood relatives but dozens and hundreds of conservation actioners — scientists, enthusiasts, officials, educators, theoreticians and practitioners — who have lived with and love Ulie's approach to life and conservation science over the last few decades.



Over the last few months, Ulie has undergone treatment which has slowed the growth of his disease and bought him sufficient time to set his life in order. Many of you may know that Ulie Seal kept a perfectly "killing" schedule. A man closer to 80 than 70, Seal spent more time in an aircraft almost than on the ground. His schedule might include a series of workshops, lectures, discussions, projects which spanned as many countries as he hopped from one city to another before returning home to Minneapolis, Minnesota, sometimes only for a day before doing it again. Ulie took time to take care of his health, dieting and exercising and avoiding all excesses except work and travel.

In CBSG, none of us close to the group had been spared confronting Ulie's death because he began many years ago preparing very consciously and vocally the way for others to take over the work of CBSG. The briefing book of the first CBSG Strategic Futures workshop had a photo of Ulie fooling around at one of those machines where you put in a quarter and feed some information to get an estimate of your lifespan. "How long will you live" was the caption. Perhaps most of us expected Ulie's demise in the form of an accident, since he was always flying and always visiting less than safe places, so to learn of this disease was a shock.

Ulie and the immediate staff of CBSG contacted the CBSG Transition team, the Global Conservation Network board, the CBSG Steering Committee, the CBSG Strategic Associates, and the leaders of various projects underway at the time. Ulie gave notice to CBSG in August when it was clear that treatment would buy him months rather than years. Over a series of meetings, some of which are pending, a plan for the continuation of CBSG was chalked out. Dr. Bob Lacy, a world renowned population biologist and developer of the

VORTEX computer programme used in CBSG's Population and Habitat Viability Assessment workshops was selected by CBSG's various committees as the most favoured candidate to take on Chairmanship of CBSG. This selection has to be approved by the SSC Chair when required.

In the meantime, Ulie's colleagues, associates, friends and family, both individual and institutional began scheduling functions and conferring honors and awards. It is rare that an individual gets to enjoy much of the recognition he is due in his lifetime. Most of the time we save accolades for later than life, but not this time.

September 15th, for example, was a night to remember. Over fifty of Ulie's friends and family attended a party to celebrate his career as a pioneer in global conservation, a rule-breaker, advisor and friend. The event was generously hosted by Lee Ehmke, Director, Minnesota Zoo, with support from the Henry Doorly Zoo, and was held at the new Tiger Lair exhibit, which was very appropriate since the Tiger Species Survival Plan was one of Ulie's first achievements in endangered species conservation.

The event included presentations by some of Ulie's CBSG family, his colleagues and oldest friends including each member of the CBSG staff, Lee Ehmke, George Rabb, David Brackett, Nate Flesness, Frances Westley, Alex Rübél, Akhouri Sinha, Lee Simmons, Ed Plotka, and Ron Tilson. Each person spoke of how Ulie had touched their lives. The overriding theme in all the presentations was the way in which Ulie's friendship and guidance has inspired each one personally and in our work in conservation.

The highlight of the night was the presentation of the three items which were a total surprise to Ulie. Steven Olson presented Ulie, with the first CD in a series of interviews he has been conducting in the Ulysses S. Seal III AudioBiography. The text from these interviews can be used in the writing of a biography of Ulie.

Nate Flesness, Director of ISIS, the International Species Information System (incidentally – invented by Ulie) announced the establishment of the Ulysses S. Seal Award for Innovation in Conservation. This award will be presented, in Ulie's honor, to individuals who demonstrate outstanding innovation in conservation as Ulie has. A medal featuring Ulie's profile will be made to represent this award in the future. In a moving presentation, David Brackett,



Honours and awards for U.S. Seal. Photo Courtesy: CBSG



George Rabb, Ulie Seal and David Brackett. Photo Courtesy: CBSG

Chairman of the Species Survival Commission, and former SSC Chairman, George Rabb, honored Ulie with the Peter Scott Award for Conservation Merit.

"The Peter Scott Award for Conservation Merit is granted by the Species Survival Commission in the name of the late Sir Peter Scott, whose commitment to global conservation, IUCN and SSC left a legacy of achievement recognised throughout the global conservation community. Sir Peter was chairman of the SSC from 1963 to 1967 and has been described as one of the fathers of conservation. Son of Antarctic explorer Captain Robert, Sir Peter Scott led a crusade for endangered wildlife that inspired many to take action to protect wild animals and their natural environments. Under his leadership, the SSC developed into a vast and effective body of specialists whose expertise is drawn on by conservation practitioners and policy makers around the world today".

A wide range of people attended from all over the world and Ulie was, of course, very pleased.



Zoological Society of San Diego Conservation Award

On Sunday, November 17, Doug Myers and Larry Killmar awarded the Zoological Society of San Diego's Conservation Medal to Dr. Ulysses S. Seal (Ulie) in Minneapolis at a small gathering (CBSG staff, his family and few other colleagues)

The Conservation Award criteria are :

- Individuals who through research and publications have furthered the knowledge of the habitats of wildlife.
- Individuals who have been active in the preservation of endangered and other species of animals through breeding programs, research, and the establishment of game and wildlife preserves.
- Individuals who have furthered the cause of conservation through continued financial support, influence or publicity. The Citation is below.

The Zoological Society of San Diego Conservation Award

Dr. Ulysses S. Seal, 11.17.02

Combining expertise in physiology, endocrinology, pharmacology, nutrition, genetics and computer modeling, Ulysses S. Seal, Ph.D. has made his life's work the preservation of the planet's biodiversity. Because of his profound dedication to conservation he is honored as one of this year's recipients of the Zoological Society of San Diego's highest honor: the Conservation Medal.

Dr. Seal has spent the better part of his 45-year career as a scientist researching prostate cancer at the Veteran's Administration Medical Center in Minneapolis. During this time, he became involved with endangered species conservation, founding the International Species Information System (ISIS), a global, central database that provides computerized animal management for more than 500 cooperating zoological institutions worldwide.

Since 1979, Dr. Seal has served as chairman of the Conservation Breeding Specialist Group, which is one of about 125 specialist groups belonging to the Species Survival Commission, one of the six commissions of the IUCN (the World Conservation Union).

Dr. Seal has published more than 260

peer-reviewed journal articles, as well as 70 book chapters and reviews. He has received many honors including the American Association of Zoological Parks and Aquariums' Marlin Perkins Award in 1991; the Chicago Zoological Society's President's Award in 1992; the Zoological Society of Antwerp's Gold Medal and the Emory University's Emory Medal in 1993; The United States Fish and Wildlife Service Great Lakes' Big Rivers Region Silver Eagle Award in 1994; the first Heini Hediger award from the International Union for Directors of Zoological Gardens in 1996; the American Association of Zoo Veterinarians Award in 2001; and the Species Survival Commission Peter Scott Award in 2002. Also, in 2002, CBSG announced the creation of The Ulysses S. Seal Award for Innovation in Conservation.



U.S. Seal receives San Diego Zoo Conservation Award. Photo Courtesy: CBSG

**Dr. U.S. Seal receives Gold Medal
Award from North of England
Zoological Society**

On 24 November the North of England Zoological Society Gold Medal was awarded to Ulie Seal in Minneapolis, presented by Dr. Gordon McGregor Reid with the Citation below:

**Dr. Ulysses Samuel Seal
Gold Medallist of the North of England
Zoological Society**

Let it be known that Dr. Ulysses Seal has been awarded by the President and Council the Gold Medal of the North of England Zoological Society. This, in recognition of his outstanding lifetime achievements in science and wildlife conservation.

Born in West Virginia in 1929, Ulysses trained as a psychologist and was awarded a Ph.D. in Biochemistry from Emory University in Atlanta, Georgia in 1957. A post-doctoral position in endocrinology and an excellent research career at the Veterans Administration Medical Centre, Minnesota followed.

During this time, Dr. Seal became concerned to develop safe anaesthesia and contraception techniques for wildlife. He conducted research with a number of species in zoos and in the field. His pioneering work led to a passionate, lifelong interest in applying science to the conservation of threatened species.

In 1973, Dr. Seal became the father of the International Species Information System (ISIS) - a global animal management database which is now used by hundreds of zoological institutions worldwide. Six years later he became the chairman of the Conservation Breeding Specialist Group of the International Union for the Conservation of Nature's Species Survival Commission. The development of the American Zoo and Aquarium Association's Species Survival Plans followed, the first of which was for the Siberian or Amur Tiger. This was presented in 1983 and used as a model for subsequent SSPs.

Dr. Seal's Siberian Tiger research continued for almost a decade and combined a wide range of expertise. This approach was then famously applied in 1987 to the Black-footed



Dr. U.S. Seal scrutinises the Chester Zoo Gold Medal presented by Dr. Gordon Reid at the award ceremony in Minneapolis 24 November 2002.

Photo courtesy: Chester Zoo

ferret *ex situ* breeding programme - a remarkable endeavour that saved a population of only 18 remaining animals.

In 1990, after 30 years dedicated service, Dr. Seal retired from the Veterans Administration Centre and devoted himself full-time to the role of CBSG Chairman. With his colleagues, Dr. Seal developed the Conservation Assessment and Management Plan process, followed by the Global Captive Action Plan and Global Animal Survival Plan methods. The CAMP process and associated Population and Habitat Viability Assessments, which combine field and zoo-based expertise and data, remain as widely used and effective tools for action planning. In 1999, the CAMP database was linked with ISIS - making critical information on wild populations available globally to zoological collections and other interested parties.

During his illustrious career, Dr. Seal has received many awards and medals, including the American Association of Zoological Parks and Aquariums Marlin Perkins Award, Chicago Zoological Society President's Award, Zoological Society of Antwerp Gold Medal, Emory University Medal, US Fish and Wildlife Service Silver Eagle Award, the prestigious Heini Hediger Award of the World Association of Zoos and Aquariums, and, most recently, the SSC's Peter

Scott Award and the Conservation Award of the Zoological Society of San Diego.

Dr. Seal has held professorships in biochemistry, fisheries and wildlife and ecology and animal behaviour and has published more than 260 peer-reviewed journal articles and 70 book chapters and reviews.

We salute Dr. Seal's lifelong commitment, boundless energy and enthusiasm, extraordinary breadth of knowledge, and outstanding contribution to the science and practical conservation of threatened wild animals. Few have contributed more to solving conservation problems and encouraging active cooperation between the zoo and wildlife community and other key stakeholders.

It is the Society's great pleasure to recognise these distinguished achievements and I, Gordon McGregor Reid, Director, request on behalf of the President and Council that you, Dr. Ulysses Samuel Seal now accept the Gold Medal of the North of England Zoological Society.

Presented this day Sunday 24th November 2002 under the authority of:

Mr. John Makinson TD, MA
His Grace the Duke of Westminster
OBE, TD, DL
Chairman of Council
President of the North of England
Zoological Society

