

OBITUARY

A light dimmed in Zoological Sciences Emeritus Professor Abraham Haim (5 August 1943 to 30 January 2019)

It is with great sadness that I report the passing of my friend and colleague, Professor Abraham Haim on 30th January 2019. Abraham was born in Tel Aviv on August 5th 1943. At his death, he was Professor Emeritus at the University of Haifa – where in 1978, he began an impressive teaching career, rising in 2010 to both Head of Natural Resources and Environmental Management and Head of the Israeli Centre for Interdisciplinary Research in Chronobiology. He held the latter position at his death, along with Head of the Management Committee of the prestigious Yitzak Shamir Research Centre.

Abraham Haim holds a special place in international zoology – not only for his leadership (he was Vice President of the International Society of Zoological Sciences over the period 2008–2016), but for his scientific and environmental systems knowledge.

We will remember him as a man with a very particular passion: a mission to address increasing anthropogenic global light pollution. Abraham had a substantial background in physiology (his doctorate being in environmental physiology) and this gave him an invaluable insight into how our planet's city and motorway lights deleteriously impact the biosphere. In particular, he was able to demonstrate how this light affected the circadian rhythms of all living organisms... including humans. This impact is manifest in increasingly erratic behaviour of many organisms – and he recognized increasing stress levels and declining health in all of the animals that he studied. Mitigation of this catastrophe was, he believed, one of mankind's great (but relatively unrecognized) challenges. Over the last decade, when many of us came to know him well, he made it very clear that he wanted to educate all on the impact of light pollution on the biota, and then to try to effect mindset changes in those people who, hopefully, could do something about the phenomenon. Over his last years, this was Abraham Haim's driving *raison d'être*.



Dr. Abraham Haim, Emeritus Professor, Haifa University

Abraham was a key figure in the organization of what was a small, but very successful 21st International Congress of Zoology held in Haifa, Israel from 2–7th September 2012. For this challenging role, Abraham was elected Vice President of the International Society of Zoological Sciences. Over 250 researchers and research students from 18 countries attended the congress, the theme of which was very appropriately “**Zoology in a Changing World: How Animals Respond to Human Activities.**”

Abraham achieved an impressive scientific output

over his life, including 183 articles in peer-reviewed journals. He successfully supervised nearly 100 research students – spanning masters, doctoral and post-doctoral levels.

Of special note for the International Society of Zoological Sciences were his recent contributions at symposium meetings, which embodied his growing concern about light pollution. In 2015 he spoke of “Epigenetic modifications in response to environmental changes a new approach environmental studies” and in 2016, “A novel global change emerging from chasing darkness away – its possible impact on mammals and human health”. In 2018, he was a recipient of the *International Society of Zoological Sciences Outstanding Contribution Award*. Unfortunately, due to illness, he was not able to receive this award in person.

There is darkness in our lives, but not in the way Abraham intended. The light that was Abraham has been extinguished, but his legacy has not... we must strive to achieve his passion to restrict light pollution, not just for him, but for the Earth's biota.

Vale Abraham... you have given us friendship, mentorship, scientific vision and most importantly a hope that we can effect a better future for the environment.

John BUCKERIDGE
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