Nicholas D. Jago Memorial

Presented by Andrew W. Harvey at the 9th International Conference of the Orthopterists’ Society, Canmore, Alta, Canada, Aug. 15 2005.

Mr. President, fellow orthopterists:

To be invited to pay tribute to Nick Jago on this occasion is both an honor and a challenge. My audience today falls into 2 categories: those who knew Nick, to whom I must give an account that does justice to the man you admired and loved, and those who did not, to whom I must give a picture of a remarkable friend and colleague who contributed so much to the lives of others.

Early life and accomplishments

Nick inherited a remarkable artistic talent, which indeed has passed to his daughter Helen, whose sketch of him I have chosen as a frontispiece for this tribute. His own talent was precocious, as shown by a sketch, made at the age of ten, while trespassing in the railway sheds of his home town. Why then did he choose a career in science rather than as an artist?

The answer lies in the influence of a neighbor, the Rev. Mr. Tottenham (below), who imbued him at an early age with a love of natural history and an enthusiasm for collecting insects. Even at that stage of his life, his accomplishments received official recognition.

Taxonomic work

From schoolboy naturalist, he progressed through Imperial College, London to professional entomologist. His Ph.D. thesis, supervised by Prof. O.W. Richards, was a revision of the genus Calliptamus, a difficult group. While a student, he was a member of a university expedition to Ghana, which fired him with an enthusiasm for Africa which never left him.

His first appointment, as lecturer at the University of Ghana, gave him an opportunity to work on the tropical African fauna and his subsequent move to the University of Dar-es-Salaam in Tanzania, gave him access to the fascinating and complex biogeography of East Africa.

In 1968 he was appointed Curator at the National Academy of Sciences, Philadelphia. There he embarked on an ambitious study of the Gomphocerinae of the World, which remains of lasting importance. He seemed to be well established on the career route of a museum taxonomist, occasionally branching to teach a course on evolution at the University of Philadelphia.

However, he was persuaded to return to England in 1970 to join the Anti-Locust Research Centre. On the face of it, this was not an obvious move in a career as a conventional taxonomist, but it reflected Nick’s desire to move out of the museum world and to put his knowledge to work in assisting African farmers and their families, who suffered from the depredations of locusts and grasshoppers. The ALRC had, of course, been founded by Sir Boris Uvarov to provide a scientific basis for locust control, but largely reflecting Uvarov’s own interests, it had included a strong element of taxonomic work. Nick’s background as a taxonomist, his field experience in Africa and his desire to involve himself in development work, made him the ideal person for such a position.

Nick attached great importance to training taxonomists from developing countries. A number came to College House, the home in London of ALRC and its successor institution, the Centre for Overseas Pest Research, on training assignments. Some were Ph.D. students, while others stayed only for a few weeks, learning the elements of grasshopper taxonomy. He also assisted in organising training courses for entomologists.

Taxonomy

As an alpha taxonomist, Nick was pragmatic and level-headed. His revisionary work has stood the test of time and remains of permanent value. He put a great deal of effort into difficult groups, such as the Catantopinae and the Gomphocerinae, which had been rather neglected.
He never forgot that the purpose of taxonomic work is to provide biologists with a practical system of nomenclature. Even though identification may be difficult if it is to reflect biological reality, he eschewed unnecessary complication. He himself made a massive contribution to the study of the African fauna. His collections, and those that were made by friends and colleagues inspired by him, are prolific. He was particularly interested in the forest fauna of the geologically ancient mountain ranges of East Africa, such as the Usambara, Pare and Uluguru mountains, where relict taxa had produced a high degree of endemicism.

His interests extended beyond this to ecology and biogeography, and in particular, to patterns of speciation. His analysis of the biogeography of the East African acridid fauna is a masterly exposition of the many factors that determine the distribution of species as we see them today. He saw how the distribution of habitat types would have changed with climatic cycles and how this would have divided species and isolated populations, while at other times, opening up corridors through which whole ensembles of species could colonise new regions. He saw how ‘islands’ of moister conditions would, as with oceanic islands, promote the evolution of winglessness and so lead less perceptive taxonomists to separate closely related species into different genera or even subfamilies.

He was interested in the way in which regional differences in rainfall regimes would lead to reproductive isolation of their acridid fauna and so promote speciation. Similarly, he saw how an asymmetry in the change of day-length between the northern and southern hemispheres might select for subtle but important differences in life-cycle response and so also lead to speciation; a process he described as a “speciation dynamo”.

He was extremely interested in applying new methods to the problems of taxonomy. Although not a geneticist himself, he encouraged the use of enzyme electrophoresis, cytology and the analysis of cuticular lipids in the solution of recalcitrant taxonomic problems.

Nick did much more taxonomy than is reflected in his published work. The arrangement of material in the drawers of the NRI collection, now transferred to the British Museum of Natural History, reflect his provisional unpublished revisions, and will be of great value to future workers.

**Plant protection in Africa**

Nick’s position at COPR involved him more and more in applied entomology directed towards plant protection. He was actively engaged in the affairs of OICMA and OCLALAV, the regional organisations dedicated to preventive control of locusts in West Africa. He was involved in a number of research projects in the *Locusta* outbreak area of the Niger floodplain, and also in an investigation of the possibility that the Lake Chad basin could be another potential outbreak area. He collaborated with the Radar Entomology Unit in their study of the migration of *Oedaleus senegalensis*. In all these projects, Nick was always the active field worker. Protected by his French Army leggings, he would penetrate the densest and prickliest bush in pursuit of grasshoppers.

**The Mali programme**

His field work on *Locusta*, in the Niger floodplain, had aroused his concern for the people of the Sahel, one of the poorest regions of Africa. He had worked with OICMA, the international organisation with the task of maintaining surveillance of the *Locusta* outbreak area, and had developed an affection and admiration (which was reciprocated) for the field staff of that organisation, and of the Plant Protection Service of Mali. This is an area of subsistence agriculture, right at the climatic limit of cereal production, subject to drought and pest infestations. In particular, it was susceptible to outbreaks of nonswarming grasshoppers, such as *Oedaleus senegalensis*. These widely dispersed infestations could not be controlled by the classic methods of locust control, which take advantage of the concentrated targets presented by gregarised swarms. Nick was determined to develop cost-effective methods of control that could be applied at village level.

This perspective soon revealed that grasshoppers were only one of many pests of millet in the region, and so the programme developed away from being purely centered on the acridids with which Nick was familiar, to a broader IPM approach. Nick found himself
leading a multidisciplinary team that ranged from taxonomists to socio-economists. One of his achievements during this period was to persuade Live Aid to provide a spray aircraft for the region.

**Talents and enthusiasms**

I have mentioned Nick’s talent as an artist, which he put to good use in illustrating his publications. He was also a skilled watercolorist, as examples of his work, made in spare moments during field work in Africa (see below), show. They also reflect his love of the landscape and people.

No account of Nick would be complete without a mention of his enthusiasm for motor vehicles. Most of us who have worked in the field in Africa have developed a reluctant acquaintance with the anatomy and pathology of Land Rovers, but in Nick, this developed into another passion. Not content with rebuilding a Land Rover in his garden in England, he embarked on the ambitious project of restoring a 1929, 20-hp Rolls Royce, the smallest ever built, which became his pride and joy. This was when I was working with Nick and I received a detailed education in the finer points of the construction and operation of early Rolls Royces. I learned about specialist craftsmen in carriagework and upholstery, the lubrication system of the engine and much more, which I must confess to having forgotten.

His daughter Debbie recalls that when Nick was restoring the bodywork, he had repeatedly to repaint and sand the wheel arches in a dust-free environment. This required him to take over the living room as a workshop and to ban the children from it. Since this was where the piano lived, they were spared two weeks of piano practice.

The operation of this vehicle was so complicated that Nick had to attend a course to drive it. For example, the circulation of the engine oil required a lever to be pulled every few miles and if the passenger wanted to open or close the blinds, he had to communicate with the driver through an intercom and the driver would then pull a cord to operate them.

The car was very popular for weddings and Nick, with his usual kindness, would offer it to friends and neighbors for these and other important occasions, dressing up for the part. He once took a retired colleague to Buckingham Palace to receive an award and passed himself off among the professional chauffeurs. On another occasion, it broke down on the way to a wedding with the bride on board. They were obliged to transfer to Nick’s other vehicle, an old London taxi, hastily redecorated with the ribbons from the Rolls, to the mortification of the bride, who insisted on a retake of the wedding photos with the more dignified conveyance. But his enthusiasm in this, as in all else, was infectious. One of the only two occasions on which he is known to have cried was when he spilt black paint on the new upholstery.

**Personality**

Any one who encountered Nick, however briefly, will remember his good humor and kindness. He had a distinctive sense of humor which might best be described as whimsical. He loved playing with words and delighted in twisting and distorting the arcane vocabulary of grasshopper taxonomy into strange nonsense. He enjoyed making fun of pomposity and self-importance. It is, alas, impossible for me to reproduce this. Nick’s humor depended so much upon a tone of voice, a gift for mimicry and his own wry or deadpan facial expressions, that any attempt would be an embarrassing failure; but many of you here will recall examples of it.

My own experience of field work with Nick was a collecting expedition, accompanied by Dan Otte, following the 1981 meeting of the Orthopterists’ Society, from Bozeman Montana down along the Rockies, through Wyoming and Utah to Texas and the Mexican border. The trip was full of incident: Nick explaining to the charming young lady at the car hire desk in Corpus Christi, Texas, that England was not, as she seemed to have heard, a communist country; Dan interpreting for us when the waitress in a diner asked in an impenetrable western accent, whether we wanted more coffee; our unsuccessful search for “La Groan Funeral Parlours” in Happy, Texas, “The Town without a Frown”. 

African village

The Niger floodplain in Mali

Spray plane donated by Live Aid.
In Utah, we stayed at a motel in what Nick christened the "Liberace Suite", a bedroom upholstered from wall to wall, and maybe, if I remember, from floor to ceiling, in six-inch shag pile carpet, and with a bed wide enough to accommodate Brigham Young and all his 12 wives. An added feature was that if a small coin was inserted in the slot, the whole structure would vibrate for half a minute or so.

Yet for all his insouciance and sense of fun, Nick was a very dedicated professional. He never flinched from the toughest assignments wherever he felt there were poor people needing his help. Not for him the image of the aid worker buzzing around the comfortable capital city in a glossy white Landcruiser. His visit to Ethiopia in the late 1970s, at the height of the Terror imposed by the Marxist regime that had overthrown Haile Selasse, must have been one of his most gruelling. In spite of the appalling security situation, he was able to visit Wollo province in the arid north of the country and investigate the disastrous crop losses caused by a previously undescribed tettigoniid. He was able to return to the area in the happier times of the mid-90s on a collaborative project with Save the Children Fund.

Nick maintained warm relationships with colleagues throughout the world. He never allowed politics or scientific disputes to mar the cordiality of his personal relationships. This was shown by the many hundreds of letters and messages of sympathy received by Margaret from around the World: a remarkable demonstration of the esteem and love in which he was held in so many countries and by people of so many backgrounds and cultures.

He was slow to anger, and his anger, if aroused, was usually caused by an injustice to a person or group of people unable to stand up for themselves.

I would like to mention the project to which Nick devoted much of his time in his latter years, his major faunal work on the grasshoppers of East Africa. This synthesised so much of his life's work, involving a great deal of major revisionary work by himself and colleagues at NRI, and bringing together his understanding, derived from years of reflection and detailed field observation on ecology and biogeography. It was his ambition that it should provide a resource, not only for those involved in pest control, but in biodiversity, conservation and the monitoring of ecological change. It involved a huge amount of work and Nick must have been reminded of the saying of those who restore vintage motor-vehicles "90% finished, half-way to go". Sadly his illness restricted his ability to continue this in retirement and he did not live to see the first volume to the press. However, with the support of the Society, the work goes forward and the material for the first volume is now ready.

Many of us here saw Nick at the last meeting of the Society in Montpellier, where he was frail, but cheerful. Nothing was more typical of him than the courage and cheerfulness with which he confronted his illness. Nobody deserved a happy and active retirement more and it was tragic to see him progressively deprived of the abilities and activities that gave him and others so much pleasure. Throughout it, he never complained or railed against an undeserved fate. His concerns were only for those who looked after him and especially for Margaret, who cared for him so devotedly. If there is one theme that runs through Nick’s life, it is consideration, care and service to others. I never knew him do a selfish thing or put his own interests before those of anyone else.

In summary then, we commemorate a friend and colleague, whose life was shorter than we would all have wished, but into which he crammed so much. He did the work he loved, in the continent he loved, for the people he loved and married to the wife he loved. He had ambition without jealousy, determination without ruthlessness, humor without cruelty: Those who knew him will be grateful for his life and we shall remember him.

Andrew W. Harvey
FAO Locust & Sunn Pest Campaign Manager

[JOR Cover: unpublished watercolor by Nick Jago, painted ‘for fun’ in Dar-es-Salam, Sphenexia fusiformis Karsch 1896, East Africa (Orthoptera, Caelifera, Pyrgomorphidae, Sphenariini)].