## Strength through synergy

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## Contact

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Professor David Hand, President of the Royal Statistical Society, made a presentation entitled, *Strength through Synergy*, in which he outlined the Royal Statistical Society's history, current focus and future aspirations. The purpose of the Society, encapsulated in its mission statement, is to develop, foster and disseminate statistical knowledge, methodology and good practice for the benefit of all society.

Set up a few years before the Institute of Actuaries, the Royal Statistical Society originally aimed to collect and classify data about society in general. Over the years it has broadened its interests and today covers many specialisms, such as medical statistics, statistical computing, environmental statistics, and quality improvement. Volunteers are the backbone of its operation and around 25% of the Society's fellows are overseas.

There have been 106 presidents of the Society, with early presidents drawn from the peerage being replaced, from about the 1870s onwards, by presidents drawn from academia or professional statisticians. Famous past presidents include William Farr (1871–1873), William Guy (1873–1875), Charles Booth (1892–1894), Francis Edgeworth (1912–1914), George Yule (1924–1926), Major Greenwood (1934–1936), William Beveridge (1941–1943), Austin Bradford Hill (1950–1952), Ronald Fisher (1952–1954), Egon Pearson (1955–1957), Maurice Kendall (1960–1962), Harold Wilson (1972–1973) and David Cox (1980–1982).

Like the Actuarial Profession, the Royal Statistical Society is now both a learned society and a profession, although its ability to create a professional qualification by examination was initially thwarted by another society (see Figure 1). It has a staff of twenty, located at its headquarters on the edge of the City of London.

The Society aims to be the leading UK source of independent advice on statistical issues. Through its links with government, academia, corporate and voluntary sectors, it is certainly one of the most influential. The Society regularly contributes to Royal Commissions, Parliamentary Select Committee and public consultations, offering a view on a range of issues, from government targets to sustainable development. Its similarities with the Actuarial Profession also extend to its regular meetings at which papers are discussed, augmented by local interest and study groups. Typically the Society has 150 or so meetings a year throughout the UK together with an annual conference. The Ordinary Meetings, like the Sessional Meetings of the Actuarial Profession, have a formal reading of a paper followed by a discussion, both of which are published in the Journal.

In a number of areas, the Royal Statistical Society and the Actuarial Profession have developed similar strategies. The introduction of a young members focus section and pre-meeting "lectures" on

- 1833 The British Association for the Advancement of Science (BA) creates a statistics section, following a presentation by Adolphe Quetelet to fellows, including Thomas Malthus and Charles Babbage.
- 1834 The statistical section of BA establishes a Statistical Society. First officer and Council elected, with Marquis of Lansdowne as President. The original objective was 'the collection and classification of all facts illustrative of the present condition and prospects of society, especially as it exists in the British Dominions'. There were 378 fellows by end of 1834.
- 1838 Publication of a Journal.
- 1840 Prince Albert becomes the Society's Royal Patron.
- 1858 Florence Nightingale is the first elected female.
- 1887 The Society is granted a Royal Charter and becomes the Royal Statistical Society.
- 1928 Formation of the first study group (an early version of the Society's sections).
- 1934 The publication of a supplemental journal on statistical methodology, which becomes a series in its own right in 1948.
- 1947 The Society's attempt to gain a supplemental charter to allow professional examinations is blocked by the Royal Economic Society.
- 1948 Society's first conference is held, in Oxford. The Institute of Statisticians (IOS), an organisation dedicated to the interests of professional statisticians is formed.
- 1950s Leading fellows include J.M. Keynes and Sir William Beveridge.
- 1993 RSS and IOS merge, retaining the title of the Royal Statistical Society.
- **2007** c.7000 members.

Figure 1. Timeline of the History of the Royal Statistical Society

## Journals

Journal of the Royal Statistical Society: Series A: Statistics in Society, containing material for specialist and non-specialist readers.

Journal of the Royal Statistical Society: Series B: Statistical Methodology, treating technical aspects and statistical methodology.

Journal of the Royal Statistical Society: Series C: Applied Statistics, featuring novel applications of statistical techniques.

## Other Periodicals

RSS News, the Society's newsletter which runs to ten editions per year. Significance (now jointly with the American Statistical Association), a magazine to communicate and demonstrate, in an entertaining and thought-provoking way, the practical use of statistics in all walks of life and to show how statistics benefit society. The total circulation of this popular publication is over 20,000.

Figure 2. Periodicals Published by the Royal Statistical Society

topics to be discussed at regular monthly meetings are examples of this. Like the Profession, the Society also has a good relationship with its US counterpart. One area where more work still has to be done is in the recognition of their qualifications as a brand worth having. Publications have also developed in a similar vein. The Royal Statistical Society publishes three journals, one newsletter and a magazine, as outlined in Figure 2.

There are a number of areas in which the Royal Statistical Society has initiatives from which the Actuarial Profession could learn. It runs regular training sessions on statistics for journalists to ensure that they, and the public, make better informed use of statistics. There are regular focused discussions with MPs and Ministers, again with the aim of ensuring informed debate and presentation of statistics. There is a network of statisticians to act as media contacts, frequent press releases on topical statistical issues, and working parties to develop considered viewpoints on various issues such as, for instance, performance monitoring, teaching statistics to 14–19 year-olds, and the Sally Clark case.

There are a couple of projects in the broad area of education where the Society and the Profession are working together. One initiative, known as 'getstats', is a statistical literacy campaign to close the gap between the knowledge, skills and perceptions of statistics that people currently have and what they require to make statistics work for them. This is a ten year project which commenced on the UN's first World Statistics Day, 20<sup>th</sup> October 2010. While this initiative is led by the Society, it is supported by the Actuarial Profession and others. Another development that is joint and exclusively between the Society and the Profession is a Stg£30,000 project to update earlier reports on how statistics is taught and learned at school, to compare these findings with international best practice, thereby identify needs and guide future curriculum development. This project is already under way and expected to conclude in June 2011.

Finally, and inevitably for a president of the society that "promotes the discipline of statistics by disseminating and encouraging statistical knowledge and good practice", Professor Hand turned to the statistical component of the Actuarial Profession's training. He quoted the Morris Report,

"1.16 ... the profession has been too insular, with insufficient contact with other professions and too narrow a professional training, and has been slow to adopt new approaches and techniques. This has resulted in useful inputs from the disciplines of economics, statistics and demography, to name only some, having less impact than they should."

Morris Review of the Actuarial Profession: Final Report (2005), p.14.

He pointed out that Statistics is a dynamic discipline that has undergone a quiet revolution over the past 30 years, driven by the computer and new application areas. He ended by challenging the Profession with two questions:

What changes has the profession made in response to the Morris Report?

What changes has the profession made to keep up to date with ongoing statistical developments?