

Information Technology

Bruce Marshall and Scott Clark

The installation of the new network infrastructure to Cat 6 class was completed early in the year and on-time by Computer Cable Networks. The system has run smoothly from day one and eliminated the problems associated with the old and increasingly overloaded network. The success of the operation was due to a concerted team effort by all involved, CCN, IT, Engineering and Maintenance and all staff at institute who had to vacate offices and labs for periods during the installation.

Louise Davidson has taken over responsibility for Systems Administration of the Novell network with many new challenges on the horizon. We congratulate her on her promotion. Lesley McGregor was then appointed as PC specialist. Lesley joined us from the commercial sector with strong customer relations experience and excellent organisational skills. We also congratulate Lesley on her major achievement of an Honours Degree in Computer Science with the Open University. Staff compliment remains at 4.5 persons.

As in all parts of the IT sector, security and the threat from computer viruses and hackers is a growing concern. We have now completed the roll-out of new virus software which is continually updated. Messages and advice are periodically posted on our intranet raising staff awareness of the problem, which is also communicated through our IT Interface Group. Security has been further enhanced by placing the Institutes network behind a firewall. There have been no significant security issues, but all staff remain vigilant.

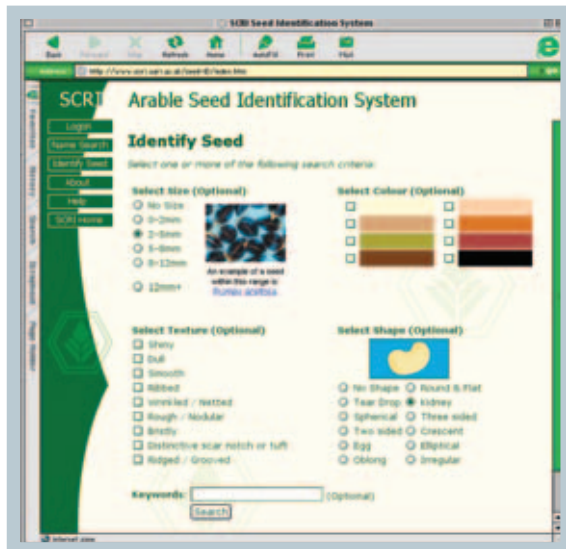
The IT department has long maintained contacts with other IT groups on the system and network administration side, both in the local universities, especially Dundee, our sister institutes in Scotland and the University of Edinburgh. This year we have started up new collaborative projects with the University of Abertay which takes IT into new areas. Two examples are the setting up of DRASTIC, Database Resource for the Analysis of Signal Transduction in Cells, and ASIS, Arable Seed Identification System. DRASTIC is a research project which is addressing the recent explosion of data-generation in the molecular biology of host-pathogen interactions. Our understanding of plant disease resistance at the molecular

level has increased particularly through studying expression data. But, there is a real danger of being swamped by the sheer volume of data. It is apparent that alternative strategies to represent signal transduc-



tion cascades need to be considered. A data-based approach with appropriate interfaces between stored data and interactive graphical outputs offers a resolution to these problems (<http://www.drastic.org.uk/>). ASIS is the result of a new venture with Computing Students in their final Honours year. Buried seeds, known as seedbanks, have a dominant role in the ecology of many types of vegetation. In arable land, seedbanks are strong indicators of plant biodiversity and of long term economic weed problems. SCRI has a quarter of a century of experience in experimentation, measurement and modelling of weed seed dynamics, and close interactions with industry and government departments. At the heart of this work is the skill to identify the diverse range of seeds present in the soil of arable and neighbouring land throughout the UK. ASIS was created to aid





researchers in identifying these seeds and act as a training tool (<http://www.scri.sari.ac.uk/asis/>). During the summer months we also employed a student from Abertay to carry out an audit of PC hard-

ware and software. The information collected is stored and maintained on database constructed specifically for the purpose. This provided vital information with which to plan new policies in software and hardware management.

Finally, while striving to provide a robust and reliable service to our customers and implementing the activities described above, IT also spent a significant amount of time planning and preparing for future developments. These include SIMS (SCRI Information Management System), migration to Netware 5, the refurbishment of the main IT user area and special provisions for the integration of staff from the University of Dundee who opened offices and laboratories at SCRI during 2002. Much planning has taken place in all these areas in the current year and in the case of SIMS a final specification was completed and put out to tender at the end of the year. The next annual report will provide an update on the progress of these new initiatives.