

Engineering and Maintenance Unit

S. Petrie

The Engineering and Maintenance Unit offers a technical design and maintenance service throughout the Institute. Preservation of Institute assets is of paramount importance and careful, skilled inspections are frequently carried out. Corrective maintenance work takes place to ensure the expected performance and life of equipment, vehicle, plant or building is achieved. The Unit is divided into sections that specialise in a variety of engineering disciplines, such as electrical, electronic, refrigeration, heating and mechanical engineering. It provides an engineering design and maintenance service to cover scientific and ancillary equipment, and building services, including heating, ventilation and air conditioning. There is also a farm workshop section providing maintenance facilities for a substantial fleet of tractors and agricultural machinery. The Unit provides a general stores facility and a cleaning and security service. The workshops are generally well equipped to deal with the maintenance tasks assigned to them.

The rapidly changing and wide ranging scientific aims of the Institute ensure that laboratory alterations will always be a part of the Engineering Unit's work. With this in mind, services to laboratories must be as flexible and adaptable as possible. Over the last few years, systems have been introduced which allow the Unit to respond quickly and efficiently when changes are necessary, thus reducing laboratory disruption to a minimum. Scientists can now confidently bring new and diverse projects to the Institute knowing that a team is on hand to ensure the facilities will meet whatever requirement they may have.

During 1999, several areas of the Institute were refurbished to either enable new and expanded areas of work to be carried out, or simply to improve the existing facilities. The main project undertaken this year was the construction of the New Research Glasshouse. This has resulted in a facility which provides approximately 1000 m² of high quality glass along with a 500 m²

headerhouse. The glasshouse area is divided into 24 individually controlled cubicles, while the headerhouse contains laboratories, tissue culture rooms, plant growth rooms and controlled environment chambers.

To offset the increased running costs associated with the new glasshouse, the Virology Glasshouse is being decommissioned during the coming year.

The Unit is also responsible for negotiating utility contracts with electricity, gas, water and telephone companies, although successful negotiations in previous years have now made further savings in these areas difficult. The Unit costs for electricity and gas were held around the same level as last year's. Telephone call charges were again reduced while water charges continue to rise.

The Unit monitors usage and efficiency of all the four utilities and although there will always be room for improvement, levels of use are now unlikely to fall significantly without major capital investment.

In recent years, ever increasing and more demanding legislation has had an effect on the work and the working practices of the Unit. The Institute must and does provide a safe working environment for its employees and visitors, but the cost of doing so is increasing annually. Much of the work to ensure their safety goes unseen by the majority of staff and often there are no tangible benefits to be gained from it. With the severe financial difficulties being faced by the Institute, it would be easy to become complacent in this area, and it is to the Institute's credit that it continues to find the necessary resources to fund this properly.

We are also educating staff into understanding that legislation now clearly defines areas of work, such as those associated with electrical and gas systems and equipment, that they cannot enter into without undermining the Institute's legal position. It is sometimes difficult for non-technical staff to understand that simple tasks such as changing a 13 amp plug or fuse must always be carried out by the relevant trained person within the organisation.

More and more time, effort and resources are being spent to cope with the 'what if' scenario all of which add to the ever increasing workload of the Engineering and Maintenance Unit.

