
The Royal 1980

The fifty-second Royal Agricultural Winter Fair will take place in Toronto November 13-22.

The Royal 1980 will include judging and sales of Canadian and American pure-bred livestock, daily horse shows, a world field crop championship, a floral show as well as an international poster contest and agricultural displays.

The 1979 fair attracted close to 330,000 people from 60 countries, making it the largest ever, and organizers expect this year's attendance figures to be even higher.

Director of Communications for the fair Clive Tisdale says the fair gives Canadian and American breeders an opportunity to bring their products to the attention of an international audience. Mr. Tisdale says that buyers come from around the world to the fair because "they're interested in the high class of breeding stock Canada has to offer". This year, international equestrian teams will compete daily in matinée and evening events.

The word "Royal" in the fair's name was commissioned by King George V in 1921 and, since then, many members of the royal family have attended the fair.

Operation a first

Surgeons at the Hospital for Sick Children in Toronto have taken a procedure straight from the research laboratory to the operating room in an attempt to save the life of a young West German child with a blocked windpipe.

Two-year-old Elke Rupp was in critical condition after surgery that transferred a piece of her intestine to substitute for the blocked windpipe.

The child was recently flown to Toronto by a German Red Cross jet aircraft from Munich. She underwent surgery by a team headed by Dr. Robert Filler, chief of surgery at the hospital and Dr. David Steward, chief of anesthesia.

Kenneth Rowe, one of the hospital's administrators, confirmed that the operation had never before been attempted on a patient.

The windpipe — trachea — is a "stiff" pipe — it must stay open all the time to permit the unobstructed passage of air. Consequently, the soft tissue of the

trachea is reinforced with rings of strong cartilage — it looks a bit like the corrugated tubing used for a car radiator.

Trachea lacks cartilage

Occasionally a child is born with a trachea that lacks adequate cartilage, so researchers have tried for many years to devise ways of supporting such a defective tube to prevent it from collapsing. Most attempts have involved some kind of support around the outside of the trachea, but this has never been very successful. Ideally, the trachea needs a device to provide support from inside which still allows normal growth.

Dr. Filler's research into the new device, used for the first time to reinforce the piece of transplanted intestine used to create a new windpipe for Elke, has been supported by the Samuel Lunenfeld Charitable Foundation of Toronto.

Grasshoppers chased on the fly

Agriculture Canada scientists are taking to the sky in their fight against grasshoppers.

O.D. Olfert and M.K. Mukerji of the department's research station in Saskatoon, Saskatchewan, have been studying ways of improving management practices to reduce grasshopper damage. One critical part in any such management system is a way to assess grasshopper damage.

"Ground surveys are time-consuming," Dr. Olfert explained. "So we decided to take to the sky with aerial photography."

The scientists are using infrared photography to study the density of the crop, or the crop's canopy, and grasshopper damage.

Infrared photography effective

"What makes infrared photography effective is that defoliation by grasshoppers alters the crop canopy and is therefore easy to spot," said Dr. Olfert.

Interpretation of the photographs involves a number of steps: identifying the cereal crop; identifying the crop defoliation caused by grasshoppers; measuring the area which has been damaged, and finally, estimating how much of the crop has been lost to the grasshoppers.

"Each crop has a specific canopy density, making fields darker or lighter on the photograph. For example, generally spring wheat appears lighter, while durum wheat is darker," Dr. Olfert said.

It is more difficult to identify oats, barley and oilseeds. However, grasshoppers are most abundant in southwestern Saskatchewan where most of the land is seeded to wheat. Another challenge facing the researchers was how to decide what crop damage was due to grasshoppers and what was not.

"To overcome this problem we made a key which the photographs could be compared to. From this information we can estimate the loss of crop through grasshopper damage," Dr. Olfert said.

The scientists have found infrared aerial photography has distinct advantages over a ground survey, especially savings in time and money.

Seminar in Australia



Three Canadians recently attended a seminar on the Pacific Community held at the Australian National University in Canberra. Officials from a number of Pacific countries attended the seminar as well as academics, businessmen and representative of international organizations. The seminar focused on economic co-operation in the region and related social and cultural matters. Assistant Under-Secretary of State for External Affairs (Asia and the Pacific) W.T. Delworth (left), attended the conference along with H.E. English, economics professor at Carleton University, Ottawa, and Eric Trigg, executive vice-president of Alcan Aluminum Ltd., Montreal. Here Mr. Delworth talks with Chancellor of the Australian National University and chairman of the seminar, Sir John Crawford (right).