



# DAVID DUNLAP DOINGS

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*Linda's Cake; baked and decorated by Jennie and Gerry Fabian (See p. 6)  
Photographed by Warren Magill*

EDITORIAL

The Mullock Oaks and Other Observatory Trees

Walking down the Observatory drive the other day, I identified the four half-grown oak trees at the corners of a large rectangle directly in front of the administration building, and recalled the circumstances of their planting.

A few years after the opening of the Observatory, Dr. Chant, thinking then in terms of an approach leading directly up from Yonge Street, decided that it would be nice to plant four young oak trees at the top of the knoll as a beginning of the fine tree-bordered avenue which he proposed to call Donald Drive in honour of Mrs. Dunlap. And who better to invite to plant the trees than Sir William Mullock? The former Postmaster General, former Chief Justice of Ontario, and Cancellor of the University since 1923 was a great lover of trees, having planted out thousands of walnuts on his farm near Newmarket. So a small party was arranged for April 26, 1938, including Mrs. Dunlap, Sir William, a few other notables and the Observatory Staff.

Sir William, then 94, was a magnificent figure of a patriarch. A huge man and still erect, he had a snow-white beard that covered not only all of his face but half of his enormous chest. He arrived, chauffeur driven, at the appointed time suitably attired in director's suit: striped pants, black jacket, fancy vest and no doubt a tie. He tossed a shovelful of earth onto one of the trees and muttered a few appropriate words (probably "admitto te in gradum" out of force of habit) and so also did three of the other notables, and then we repaired to the library for tea while Tom McKenzie, the caretaker, finished the planting. I had a distinct feeling that Sir William would have preferred a glass of whiskey - in fact I am not sure that he didn't say so. Nevertheless he was articulate enough and regaled us with some very funny but rather earthy stories. At five o'clock we all went home and left the little oaks to begin their slow growth to maturity.

It would be nice to be able to say that those four are now the sturdy oaks that we see today. In point of fact only three of them are. The one at the north-east corner (the one that Sir William himself "planted") died and had to be replaced a few years later; it is now noticeably smaller than the other three.

There are several other stories about Observatory trees. For example, the plantation at the Bayview end of the property. In 1935 the Superintendent's Department planted about ten acres in seedlings of all kinds, proposing to transplant them after a few years in more appropriate locations. But the few years took us into the wartime manpower shortage and by the time the war was over the trees were too big to move economically, though Tom McKenzie, on his own initiative, brought up, by wheelbarrow, one at a time, enough spruces to plant the crescent which now half-circles the dome.

Dr. Frank Hogg was always concerned about the relative bareness of the knoll, thinking that a tree cover would improve the seeing. In 1949 he succeeded in persuading the superintendent to begin a mixed planting, starting with a screen at the tracks. But it was one of the driest summers of the century and they nearly all died and the "Sup." would have no more to do with trees.

Frank then began talking about an "arbor day" when we would all go out and plant government seedlings. He didn't get around to it though, but after he died I felt it incumbent upon me to carry out his plan. It was in 1953, if I remember correctly, that I cajoled the staff into an arbor day which stretched out into a weekend, and we planted 3000 Norway spruce to the north of the dome. The next year, remembering our blistered hands and sore backs, we accepted the offer of a teacher to bring his class for another planting of 3000. That was rather a disaster; some of the seedlings were nearly buried, others lying prone, a few upside down. Nevertheless we went at it again in 1955 and planted 3000 more. A few years later Professor Hosie of Forestry, inspecting our efforts, glumly predicted that in five years time there wouldn't be a spruce left alive. Prof. Hosie has since gone to his arboreal reward, but he was wrong; the gallant survivors of our 9000 now constitute the forest between the dome and Hillsvew Drive.

And then there are the Faculty of Forestry plantations, the so-called David Dunlap Arboretum. I think they were planted partly for experimental purposes and partly to quieten our repeated clamourings to have the grounds properly developed as a botanical garden and arboretum. But in the same breath let me admit that the knoll itself is being beautifully cared for now - which it wasn't always.

J. F. H.

### OBSERVING

#### At D.D.O.

Frank Ahern, having obtained a fair number of very satisfactory observations with his Fourier interferometer has now shipped the instrument to the Lowell Observatory at Flagstaff where it will be used this summer by him and Chris Pritchett on the Perkins 72-inch. Meanwhile Dr. Bolton has reactivated the 40 A/mm camera of our grating spectrograph and reports that "it works as well as it ever did" - which is faint praise.

#### At Las Campanas

Christine Coutts has recently returned from a four-week observing session at Las Campanas with 150 plates of globular clusters, some for Dr. Hogg's program, some for her own. This being the poor-weather season there, she had only 65% clear skies. However the winter is exceptionally mild this year, the night-time temperatures being seldom below 50°F and sometimes above 60°. Christine reports

that Chris Smith is now settling in as observing assistant and will take the next few weeks alone on the telescope. She also reports on the Garrisons who are living mostly in La Serena, but who were in Santiago on June 29th during the storming of the Presidential Palace, staying in a hotel only a few blocks away. Bob is apparently getting a good deal of observing time at Cerro Tololo by dint of being on hand when regularly-scheduled observers are unable to observe.

### R Aqr

Dr. Seaquist, during his June observing session at NRAO Green Bank, re-observed the region of R Aqr with the radio interferometer at 3.7 and 11 cms and was able to confirm this star as the source of the radiation which Dr. Gregory and he had observed in April and May at ARO at 2.8 cms. The radio emission, which fluctuates irregularly, is presumed to be associated with the faint filamentary structure which has long been known to surround this peculiar symbiotic star.

### COMINGS AND GOINGS

Dr. van den Bergh returned on July 9 from extensive travels referred to in the June "Doings". On June 18 he gave a talk on "Galaxy Evolution" to the Italian Centre for Nuclear Research in Frascati after attending the inauguration of the new Italian 74-inch telescope in Asiago on June 16. At Cambridge he talked on "Old Stellar Populations and Galaxy Evolution", "Differences between Galaxies" and "The Supernovae of the Second Millenium A.D.". At Tel Aviv University he talked on "Supernovae". At Ruhr University, Bochum and at the Kapteyn Astronomical Laboratory, Groningen, he talked on "The Supernovae of the Second Millenium A.D." He left again on July 19 for Palomar where he is observing for one week on the 48-inch and one week on the 200-inch.

Dr. Bolton on June 18-19 visited Warner and Swasey Observatory, speaking on "Observations of Cygnus X-1". On June 20-21 he visited the University of Michigan, examined Schmidt plates and spoke on "Optical observations of Cygnus X-1". On June 22-23 he visited his mother and sister at Bloomington and then attended the AAS meeting at Columbus on June 24-28. There he presented a paper on "Mass Estimate of the Secondary of Cygnus X-1" and attended the Council meeting as a "young astronomer". He reports a long vist with Dr. Dennis Marks, Post-Doc here a few years back. Dennis, still at Valdosta State in Georgia, enjoys teaching a number of new courses but admits that Valdosta lacks some of the charms of New York City and Toronto. He sends greetings to all.

Austin Gulliver has returned from a four-day visit to the University of Michigan where he conferred with Dr. Anne Cowley and selected nearly 200 spectrograms of shell-stars, 60 of which he has brought back with him, the others to be borrowed later.

Dr. MacRae has just returned from Paris where, from July 17 to 20, representatives from Canada and Hawaii met with their French counterparts for discussions in connection with the CFHT. Dr. MacRae comments that it is not easy to spend 91 million French francs even when the money is there and everyone directly concerned is anxious to proceed as quickly as possible. An impressive tangle of protocol has delayed the actual signing of the Memorandum of Understanding between the three agencies, CNRS, NRC and UH. As a result of the Paris meetings, however, the necessary preliminary exchange of diplomatic notes was initiated. It was also announced by the French that the mirror blank is on the high seas, en route from Meudon to Victoria where it will be ground and polished.

Dr. Hogg suffered a bereavement in the death of her brother-in-law in Massachusetts, and was there for the funeral at the end of last week. On the evening of August 1 she will be in Ottawa as a guest of Prime Minister Trudeau at a reception for Queen Elizabeth and the Duke of Edinburgh.

Dr. Fernie left on July 23 for London where he will spend a few days and then fly to South Africa where his family are now holidaying. Two weeks later he will fly to Australia for the IAU General Assembly and complete the orbit on August 31.

Dr. Heard represented the Observatory at the official opening of the Nicholas Copernicus Exhibition at the National Museum of Science and Technology in Ottawa on June 19.

In June Bob Deupree gave a talk on non-Radial Pulsations at the Institute of Astronomy at Cambridge University.

Roslyn Shemilt played in the field hockey competition at the Ontario Summer Games in Oshawa on the Dominion Day week-end, winning a silver medal as her team placed second. Since then she has been selected for the starting eleven to represent Ontario in Canada Summer Games scheduled for August 3-10 at Burnaby, B.C. Congratulations to Roslyn for ranking in the first 11 in a total field of 1500! Don Fernie shares her view that field hockey is the real hockey.

## SEMINARS

### JULY

As well as Brent Tully's talk on "The Whirlpool Galaxy" on July 17, there was a talk on July 11 by Charles Dyer on "Observations in an Inhomogeneous Universe".

### August

None planned.

PAPERS SUBMITTED IN JULY

E. Seaquist            A Search for Circular Polarization in Compact  
P. C. Gregory         Radio Sources at 2.2 cm.  
T. R. Clarke

R. C. Bignell         Rotation Measures of Extragalactic Radio Sources

J. Winzer             UVB Observations of Supernova 1970 in NGC 5457

P O T P O U R R I

Discipline Assessment

The Department was visited on July 12-14 by the four consultants assessing departments of physics and astronomy of Ontario universities on behalf of the Council of Ontario Universities. The consultants were Dr. L. H. Aller, U. of Cal., Dr. A. E. Douglas, NRC, Dr. R. Haering, UBC, Dr. P. N. Nikiforuk, U. of Sask. There were a variety of meetings and consultations on the 12th and 13th, and on the 14th Dr. Aller visited the Observatory for the better part of the day. All those on hand were invited to a buffet luncheon by Mrs. MacRae at Observatory House.

Final Oral

Charles Dyer successfully defended his thesis on "Observations in an Inhomogeneous Universe" on July 18. Charles has already left for Cambridge where he will enjoy a post-doctoral fellowship.

Staff Nuptials

Both Archie Ridder and Linda Bobo were entertained at staff tea parties during the past month prior to their weddings, and presented with gifts - in each case a decanter and set of glasses. Archie's party was on June 28, and he was married on July 14 to Ingrid van Lubeek. Linda's party was on July 10 and she will be married on August 4 to William Thomas Twitchin. Our best wishes to both young couples.

GASA Elections

At the election on June 27 the following new officers of Gasa were named:

President:	Bruce Campbell
Vice-President:	Bob Deupree
Secretary-Treasurer	Dave Hanes
GSU Representative	Kayll Lake

### Correction

Our apologies to Barbara Irwin for reporting her recently awarded M.L.S. as a B.L.S. Barbara is working in Toronto on contract for the Fisheries Research Board of Montreal.

### Public Star Night

Scarborough College will host an R.A.S.C. Public Star Night on Friday evening, 17th August 1973. Members of our department in particular are cordially invited to take advantage of this opportunity to visit Scarborough College, (part-time abode of 3 of our staff and several graduate students) particularly if you have yet to make your first visit there.

### Cassiopeia

As all members of CAS must know, the Society is embarking upon a quarterly news letter to be edited by Dr. David DuPuy and me. If all are agreeable I will extract from DDD material the items of news which I think would have general interest. If, on the other hand, you have items which were missed by DDD or short articles or letters to the editor, please submit them to Dave before the August 10 deadline.

J.F.H.

### Born

To Robert and Janet Deupree a son, Alexander Robert, on July 12.

### Departure

John Roger, having completed his Master's program, will be leaving the department this week and, early in August, will be travelling to Nigeria to commence a two-year stint with CUSO.

### Alumna to be Wed

The marriage will take place in Pasadena on August 4 of Inge-Juliana Sackmann (Ph.D. 1968) and Robert Frederick Christy. The bride-to-be is well known to us, of course, and Canadian-born Dr. Christy was one of the speakers at our 1968 June Institute. The wedding, as befits the principals, will have a strong astronomical flavour. Dr. William Fowler will lead the bride to the altar, Dr. Jesse Greenstein will serve as usher and the garden of the President of Cal. Tech. and Mrs. Brown, where the reception will be held, will be suitably decorated. Our best wishes to Juliana and congratulations to Dr. Christy.

### Library Now Licensed Premises

Librarian Carol Morrison now has her driver's license.

## GASA Picnic

The first of several GASA outings planned for late afternoons and evenings took place at Bruce's Mills Conservation Area on July 24. About 15 staff and students attended for swimming, picnic lunch and softball. The softball game was the feature of the evening with 11 players and a crowd of two spectators. At the end of the sixth inning the team of Gretchen Hagen, Frank Ahern, Dave Hanes, Dave Still, Tom Bolton and Roslyn Shemilt were trailing by 14-25 the powerful combination of Austin Gulliver, Bill Harris, Chris Pritchett, Jim Thomson and Nolan Walborn; but by two-thirds way through the 8th inning Gretchen rallied her team-mates to win by 29-25, the game being called on account of darkness and exhaustion. Pitcher Pritchett, fielder Hagen and slugger Gulliver were rated the star performers.

## FINAL ITEM

### JFWH and the Great Moon Hoax. III

Richard Locke must have realized that the game would soon be up, and in any case, he seems to have tired of the whole thing rather suddenly. He had already had to stretch things out quite a bit, with a few cloudy nights thrown in, and moonset coming rather early on occasion. (Sir John would then thoughtfully call his night-assistants together and "reward their vigilant attention with congratulatory bumpers of the best 'East India Particular'", a courtesy sadly neglected by modern astronomers. Although after one such occasion they carelessly left the giant lens out, and were called next morning by some "domesticated Hottentots" to find that the sun, focussed by the lens, had burnt down a clump of trees and "vitrified to blue glass" the plaster of the Observatory's walls.) There was a half-hearted attempt at getting Herschel into new fields (for instance Saturn, whose rings "are composed of rocky strata ... in a state of wild and ghastly confusion, but not devoid of mountains and seas.... The belts across the body of Saturn he has discovered to be the smoke of a number of immense volcanoes ..."), but this wasn't much of an encore.

*The Sun* had hinted at there being a good deal of mathematical material in the reports which they had withheld from their general readers, and two Yale professors turned up at Locke's door asking for this. He told them it was available at a different address, and then, while they were finding their way there, he himself doubled through back-streets to order them sent to yet another address. It didn't take the professors long to realize the truth. The denouement came from another New York newspaper, the *Journal of Commerce*, which had asked to reprint the whole thing yet again. Locke, it seems, suddenly gave up and admitted to the whole thing being a hoax.

What was the general reaction? Mostly it seems to have been one of amusement and indulgence, a rip-off of the Establishment rather than the public. Edgar Allen Poe made the astute observation that those who had doubted the story from the start were mainly to be found among the less-educated, he himself having been gravely assured by a professor of mathematics in a Virginia college that he had no doubt of the truth of the whole affair. Not that every professor was a believer. When the story finally got across to Europe, Arago and the French Academy



were outraged by this besmirching of John Herschel's name. There is no report of reaction in Britain. What else, perhaps, could one expect out of an ex-colony like America?

John Herschel, quietly working away with his 18-inch reflector in far-off Africa, heard about the story some time later. Apparently, a Mr. Weeks from New York was in Cape Town to buy animals for a menagerie, when he encountered Herschel in a hotel there and showed him a pamphlet in which the whole hoax was reprinted. Herschel was at first agitated in case the thing had in fact originated in Edinburgh, but on being reassured that it was merely the work of a New York newspaper, he was much amused. Curiously, although Herschel kept a day-to-day diary during those years, there is no mention in it of the Moon hoax. All that I have been able to find from Herschel himself is a post-script to a letter written to his aunt, Caroline Herschel, on January 10, 1837, which says "I have been pestered from all quarters with that ridiculous hoax about the Moon - in English French Italian and German!!" His wife, Margaret, also writing to Caroline in October 1836, said only a little more: "Have you seen a very clever piece of imagination in an American Newspaper, giving an account of Herschel's voyage to the Cape.... The whole description is so well clenched with minute details ... that the New Yorkists were not to be blamed for actually believing it.... - It is only a great pity that it is not true, but if grandsons stride on as grandfathers have done, as wonderful things may yet be accomplished..." Evidently the Herschels took a rather indulgent view of the matter.

And what, in truth, had Herschel been up to during these years at the Cape? There were the double-star and nebula surveys, of course, but also much besides. He had in fact observed Halley's comet in October of 1835, although not without a frustrating delay in locating it, despite working from a detailed ephemeris. Herschel was very much put out when, upon his triumphant announcement to his family, he learnt that his young son, James, and assistant, Stone, had already seen the comet several days previously during a casual glance at the sky ("I never was more inclined to give a man hard words or even a hard knock..."). There were also his observations of  $\eta$  Car during its outburst, his establishment for the first time of the relationship between luminosity and the magnitude scale, detailed studies of the Magellanic Clouds, and early work on the solar constant, to name only a few of his activities.

Richard Locke was right in one respect at least; Herschel did accomplish a great deal of interest during those years in Africa. But eventually they ended, and in March of 1838 he and Maggie and their family packed their things and sailed away forever from the land of sunshine and tears.

(A full reprint of the hoax will be found in the February, March, and April 1937 issues of *The Sky*, and an abbreviated version in Willy Ley's "Watchers of the Skies", Viking Press, New York, 1963. Herschel's diaries and letters appear in "Herschel at the Cape" by D. S. Evans, T. J. Deeming, B. H. Evans, and S. Goldfarb, University of Texas Press, Austin, 1969).

*J. D. F.*