

primary and secondary schools, and in the same period 7,000 left the schools. Wastage was greatest among those under thirty, and was also high among untrained graduates under 25. The comparable figure for women was even higher—representing 13 per cent of those qualified and in service, and wastage was again high among untrained graduates. Significant proportions of this wastage could, however, be attributed to transfer from one teaching establishment to another, although among qualified women teachers only 1,000 out of a total of 20,000 transferred in this way.

NUMBERS OF STUDENTS IN COLLEGES OF EDUCATION AND UNIVERSITY DEPARTMENTS OF EDUCATION (other than supplementary courses)

Numbers of students	1956-57	Oct 1962	Oct 1964	Oct 1965	Oct 1966
In university departments of education	2,512	3,260	3,739	3,695	3,192
In colleges of education	26,039	47,682	62,112	72,856	84,911

The last page in the report lists the salaries of teachers in colleges of education at March 31, 1966. For male graduates the average salary was £1,539 for those under thirty, rising to an average of £2,674 for those aged 60 and over; figures for women graduates were very similar. Male non-graduates received some £100 less under the age of 30, and about £140 less over the age of 60.

## Change on Blood Tests

THE British Home Office seems to be modifying slightly its attitude to the tests by which motorists in Britain can now be convicted of driving under the influence of alcohol. A recent paper in *Nature* by Professor J. B. Payne, Dr D. W. Hill and Mr D. G. L. Wood of the Royal College of Surgeons (217, 963; 1968) suggests that the methods used by police authorities for carrying out the tests are far from accurate. The method by which the amount of alcohol in the bloodstream is estimated from the amount in the urine seems particularly suspect. So far the Home Office has not been forced to act, because no motorist accused of driving under the influence of drink has quoted Professor Payne's work in his defence.

Although the Home Office has not changed its views on the urine test, there does seem to have been a shift of emphasis in the blood tests. Originally, after advice from the medical associations, police surgeons were advised to take small samples of capillary blood for use in the test, although it was also open to them to take venous blood if they preferred. The work at the Royal College of Surgeons suggests that the latter is likely to give more accurate results, because of the way in which the alcohol tends to become more concentrated in the plasma than in the red blood cells. Blood taken from capillaries can often contain more plasma than blood from veins, so that the capillary method can give anomalously high readings, with the possibility of conviction for a driver who is in fact under the limit.

The Home Office has now sent a circular to police authorities pointing out that it is within their discretion to take venous rather than capillary blood. The police authorities are advised by the Home Office always to have available a supply of syringes with which venous blood samples can be taken. The motorist can still

decide which method he prefers, though the doctor will be at liberty to advise the syringe method if he thinks fit. The circular also points out that the motorist has the right to keep a sample of his own blood for independent analysis, and that these samples should be sealed, stored in a cool place, and analysed with the minimum of delay.

So far, this is no more than a recommendation from the Home Office to the police authorities. Both methods of taking blood are still legal, and the circular says nothing of the inaccuracies of the urine test. But in the event of a driver being acquitted because of the inaccuracies which Professor Payne and his colleagues have discovered, the Home Office would doubtless have to act very much more decisively. Whether the work provides new grounds for appeal for those already convicted under the existing law has yet to be tested, but there is an urgent need to clarify the situation. Sooner or later the Home Office will be forced to set about the task.

## Preserving the Bastard Toadflax

THE Nature Conservancy has announced two new nature reserves and an extension to another, bringing the total number of national nature reserves to 124, covering 257,239 acres.

One of the new reserves is in the central part of the range of chalk hills forming the northern scarp of the Vale of Pewsey seven miles south-west of Marlborough. It is a fine example of unreclaimed chalk downland, and it has long been known to botanists and entomologists for its rich plant and insect life. Extending from Milk Hill in the west to Knap Hill in the east, the reserve covers 188 acres and it has been established by agreement with New College, Oxford, and the agricultural tenant. The summit of Milk Hill (964 ft) is the highest point in Wiltshire. Examples of plants found in the reserve are round-headed rampion, field fleawort, bastard toadflax and several orchids. The Chalk Hill Blue and the Brown Argus are two of the butterflies found. There are also several features of archaeological and historical interest. One of the best examples of a neolithic causeway camp lies on Knap Hill, and there is also a chambered long barrow known as Adams Grave on Walkers Hill.

The other new reserve is at Ebbot Gorge, Somerset,

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