

PHOTOGRAPHING FUNGI — 3

GORDON DICKSON

COMPOSITION

Placement within the picture space (or 'frame') can make a lot of difference to the aesthetic appeal of any subject: a tall, thin subject placed upright in the centre of a horizontal or landscape frame only divides the picture in half and looks 'wrong'. The same subject placed in a vertical format and a little off centre can be much more appealing. It is unfortunate that the microprism focussing device has to be always centrally located but there is no reason why one should not focus and then move the camera sufficiently to place the subject in a better position.

There is a well known principle of composition which states the 'intersection of thirds' is a strong point to place any subject i.e. where horizontal lines one-third and two-thirds of the height of the frame intersect corresponding vertical lines. The introduction of a curve into a picture helps; this can sometimes be achieved by slightly changing the viewpoint of a group of fungi or the use of a curve in the surrounding material. The possibilities are endless and will depend on individual choice — the important thing is to spend a moment or two (or even longer) thinking about the picture as a composition and not just of a fungus. My own preference is for the vertical format as it seems to suit most agarics and the picture is more obviously divided into a foreground, subject and background, with the latter extending further within this picture shape. I do not take *all* my photographs in this way but I would make a plea that it be considered as an alternative! Furthermore, the front cover of *The Mycologist* is taller than it is wide, as are most books, so when your photographs reach the required standard you will have an outlet for this shape.

FINAL ADJUSTMENTS

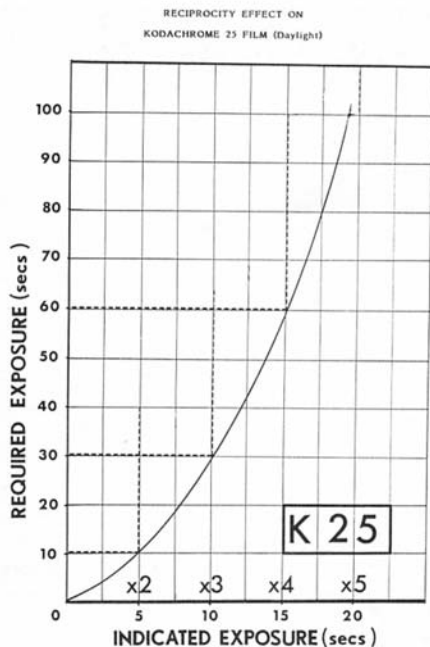
In the majority of cases the actual exposure should be made at the smallest

possible aperture i.e. the largest aperture number, in order to achieve the greatest 'depth of field', which means that *all* the fungus and *all* the foreground and as much as possible of the background will be absolutely sharp. This means a correspondingly longer exposure — hence the tripod.

Focussing, however, is always done at full aperture so as to be as accurate as possible, and the aim is to get the front of the specimen sharp, although this may have to be varied in the case of extreme close-ups. As one reduces the aperture so more of the picture becomes sharp, and most photographic books advise reducing it to check the amount of focus; in fact many cameras have a 'stop down' button or lever for this purpose. Personally if I stop down to the smallest aperture I am quite unable to see anything at all. I suggest before finally refocussing on the specimen that the lens be focussed very slowly right out to infinity and back to the closest possible distance while still at full aperture and with your eye to the viewfinder; in this way any obtrusive piece of vegetation e.g. a yellow leaf in the background, a blade of grass or a twig across the foreground becomes apparent and may be removed. But don't forget to finish by refocussing as accurately as possible on the nearest point of the subject. (To be exact the position should be slightly *behind* this point as the zone of sharpness extends forwards as well as backwards when you stop down, though by a smaller amount).

THE EXPOSURE

With the development of microchip technology an increasing number of 35mm single-lens cameras have 'through-the-lens' exposure meters and anyone attempting serious photography is urged to use this type of camera as it takes care of the inevitable change in effective lens aperture as the camera gets nearer to the subject.



Prepared by GORDON DICKSON from data supplied by KODAK Ltd. 3/83

Most modern cameras have the meter linked automatically to the shutter and one has only to set the film speed on the appropriate dial and let the camera get on with it. At least so it appears but there

are two hazards which become apparent when the long exposures associated with fungus photography are attempted. The first is that there are two kinds of through-the-lens meters; one measures the light immediately before the exposure and sets the shutter speed accordingly, whilst the other meters the light falling on the film *during* the exposure. If the light remains constant both are equally good, but if the light changes between the opening and closing of the shutter (and it may in a 30 second exposure) the latter method has the advantage.

RECIPROcity FAILURE

This is the second problem: it is a fact that in the normal range of hand-held exposures reduction of the aperture (i.e. one stop) necessitates doubling the exposure time — and vice versa. This is known as the **Law of Reciprocity** and once the exposure time exceeds one second it ceases to hold, hence 'Reciprocity Failure'. At one second Kodak recommend, for most of their films an increase of half a stop. As the time increases so the exposure must increase dramatically as shown in the graph.