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How long do you dry eggs?

Breeders very often ask: "how many weeks (or months) do you dry up this species before hatching?" Are you able to give him a correct answer? Possibly, but not always.

Drying may be done in several ways that give different results. First of all the supply of oxygen (to my opinion) is of great importance. As any drying out of peat with eggs will end with peat and eggs in an airtight container (in order to prevent further loss of water) the oxygen supply may be out of any control depending on the use of oxygen by other organisms present in the peat and in particular by the decomposition of dead eggs and other organic matters in the peat. A reduced supply of oxygen may kill the eggs that so far have developed totally - and may stop the development of resting eggs or turn eggs into the phase of "resting embryo" (only seen in Nothos). If the drying up is not brought out of the moist state into the "tobacco state" the supply of oxygen to eggs possibly will not be even. Some eggs will get more than others get. The conditions for development may then be uneven indeed.

If drying, on the other hand, is allowed to progress very near to completely dry, in some species (Nothos) at least, you will also find that the development is not as quick as you found it inside eggs in water at the same temperature and independently of the supply of oxygen. There seems to be an optimum between "moist" and "very dry". Therefore it possibly cannot be wise to tell people that this and that species should be stored as eggs in dry peat for about 4 months. Perhaps not a single fry will come out after this predetermined number of months, and perhaps all are hatched. As long as we do not know the factors that govern the development of the resting eggs in annual fish, we possibly only may say that in water at a certain temperature and perhaps also at a certain water composition and with the free entrance of air, a certain percentage of eggs may be ready after a certain time. Indeed the "drying up procedure" is very interesting and people always will be very interested in doing it for fun. However, as we know that eggs normally do not develop all at the same time, the final result may be very fine or very poor depending on what time the wetting is done. The wetting may come too soon and may hatch fry too early (yolk ball), or may come too late and produce weak fry and many belly sliders. Only very seldom you will hatch all eggs present, and then you have to redry and rewet and redry and so on. Why not develop eggs in bowls or glasses in clean water with a good supply of oxygen to every egg? Then each week or every two weeks you may pipette out the ripe eggs and place them into dry or moist peat giving them a final drying of a week or so. By this way you may produce a good fry out of any egg present. However, this way is, by far, not as interesting as the "drying up of peat". On the other hand it is more effective.