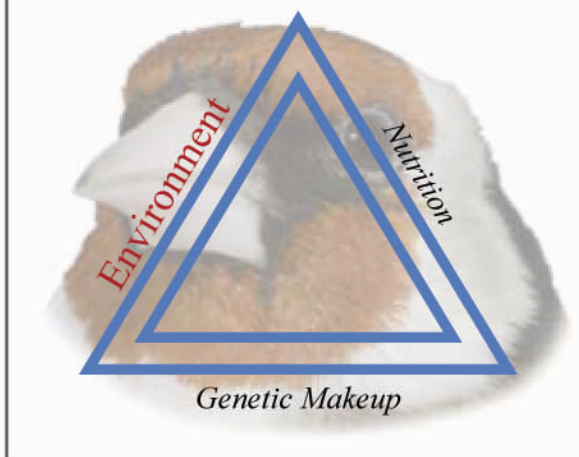


ENVIRONMENT: THE BREEDING SET-UP

Goldfinches can be bred indoors as well as outdoors. For indoor breeding, we must create a suitable environment in terms of light, temperature and humidity, for reasons which we will be explaining shortly. In outdoor settings, whether breeding is carried out in cages or in an aviary, the only 'artificial' factor will consist of a sound design or choice of housing, and proper orientation.

Walther Tringle



Indoor breeding premises

Indoor breeding spaces usually consist of one or more breeding rooms housing breeding cages and sometimes aviaries. More often than not these spaces are chance locations, such as garages, basements or attics, and exposure to light is obviously dependent on existing windows and orientation of the building. If in theory a south or south-west orientation is considered to be the best for allowing through the beneficial vitamin D generating sun rays and UV rays into the breeding quarters, in practice one is forced to adapt to the constraints imposed by the available logistical situation.

Our advice would therefore be that before getting hold of the chosen space and covering its entire walls with cages, you immediately apply a number of technical solutions designed to optimize the environment to be populated by your breeding stock. This goes a long way towards optimising health and breeding performance.

Painting the walls in white washable paint is much conducive towards the concentration of light in the premises and a healthy animal and human psychology. It would be best to cover the walls themselves with a sheet of opaque plastic (nylon) that will act as an intermediate surface between the cages and the walls, in order to avoid excessive soiling and as a deterrent to the growth of parasites that would

otherwise grow much more profusely on a bare wall or wooden surface.

The cages can be supported on shelves or hooks fixed to the wall with the aforementioned nylon sheet still in place. Apart from being a low-cost solution, hooks allow the use of the full height and length of the walls without obstructing the light inside the room. Their only drawback is that they require that holes be drilled into the walls. On the other hand, shelves may allow a few centimetres space between the cage and the wall. The disadvantage of this method is that the shelves accumulate dust and reduce the amount of light in the premises. The choice of method will, as always, depend on one's personal preferences and exigencies.

Other factors meriting due attention during the design phase are those related to the fundamental concept of **air circulation**. We shall refrain from suggesting calculations that are more or less uncertain, based on more or less valid scientific assumptions: amount of oxygen needed by each bird, number of birds per square metre of space on the premises and consequently the amount of oxygen that needs to be introduced into the premises in connection with what has been referred to in the preface, namely the concept of the presence of microbes in the breeding and rearing environment and the importance of avoiding excessive stagnation of air and moisture in indoor breeding spaces. If, as we have seen, each room contains dust that is more or less pathogenic depending on the number of birds in the room, their state of health and our attention to hygiene, it follows that frequent changes of air would be helpful in eliminating such dangers, while giving the added advantages of a reduction in the presence of microbes in the atmosphere and a better and more healthy oxygenation of the premises. This will prove to be even more important when new specimens are introduced into the breeding rooms.

Albino male: an 'extreme' mutation that has to be housed in an aviary and cannot possibly be raised in artificially illuminated premises as this often induces false moult.

