ADDENDUM

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Colonies of Colonies in *Physalia*

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It is arguable that the highest level of coloniality in the Hydrozoa, and possibly in the Coelenterata, is seen in *Physalia physalis*. As is well known *Physalia* is a "colony" comprising several kinds of "individuals". The "colonies" themselves also aggregate—albeit passively—in suitable conditions, forming vast swarms extending sometimes for hundreds of kilometres, and sometimes so dense that they partially obscure the surface of the sea (for example the great density reported in *The Marine Observer* (1976) Vol. 46, p. 61). The local impact of the long tentacles (up to about 20 m) on the sub-surface environment must be considerable. Passive though the aggregations may be, it would seem likely that they have some influence on the *Physalia* populations. The influence might be positive (for example in promoting spawning) or negative (for example in depleting food sources); but information seems lacking.

Aggression between the separate "colonies" has apparently not been recorded from *Physalia*, and in a planktonic environment it is hard to see how spacing out could be achieved by a passively floating species. Nevertheless, if aggression is in fact absent then it is arguable that in forming non-aggressive aggregations of "colonies", *Physalia* exhibits a high level of coloniality. The swarms, or "colonies of colonies", when they occur achieve a dominance of the local water mass to a degree unusual among the Coelenterata.