

Regional specialization of the quail retina: Ganglion cell density and oil droplet distribution

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The ganglion cell density of the quail's retina was studied in sections and whole mounts. Two regions of high ganglion cell density were found, corresponding to an afoveate area centralis and an area dorsalis. Oil droplets were found to be isotropically distributed throughout the retina. It is proposed that the significance of such retinal regional specialization, in comparison to similar studies in the pigeon and the chick, is that regional specialization in the avian retina is more closely related to feeding habits than to phylogenetic descent. © 1984.