

Egg Volumetrics

Isobel Styles

University of Bristol, HH Wills Physics Laboratory

Bristol Zoo requires information about the volume of its avian eggs, in order to monitor their rate of loss of density during incubation. A method has been developed whereby the volume of a bird's egg can be calculated to a good degree of accuracy, $\pm 6\%$, and without posing a risk to the developing embryo inside. A digital image of the egg is taken against a uniform background creating a region in the image whose area represents the cross-sectional area of the egg. Using the assumption that an egg has circular symmetry about its long axis, the volume can be calculated by summation of a series of disks, each of thickness 1 pixel, along the length of the egg.

For more information contact:

Research Department, Bristol Zoo Gardens, Clifton, Bristol BS8 3HA

research@bristolzoo.org.uk



See it · Sense it · Save it