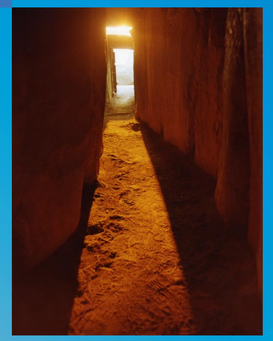
The Winter Solstice

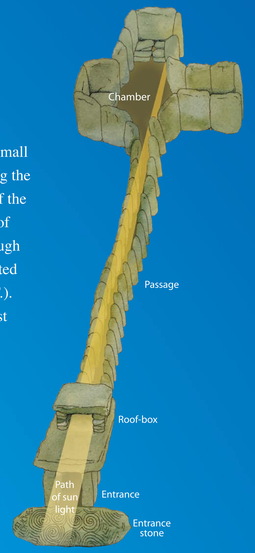
The Winter Solstice Archaeological excavations at Newgrange have shown that the monument was built about 3200BC by Ireland's first farmers, the Neolithic people, who possessed remarkable expertise in engineering, art, architecture and astronomy.

The Research work of the late Professor O'Kelly of University College, Cork led to the reconstruction of the area surrounding the entrance to the tomb and one of his most spectacular discoveries – the illumination of the chamber by the rays of the mid-winter sun.

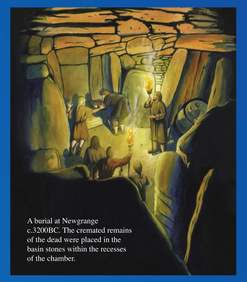


The roof box

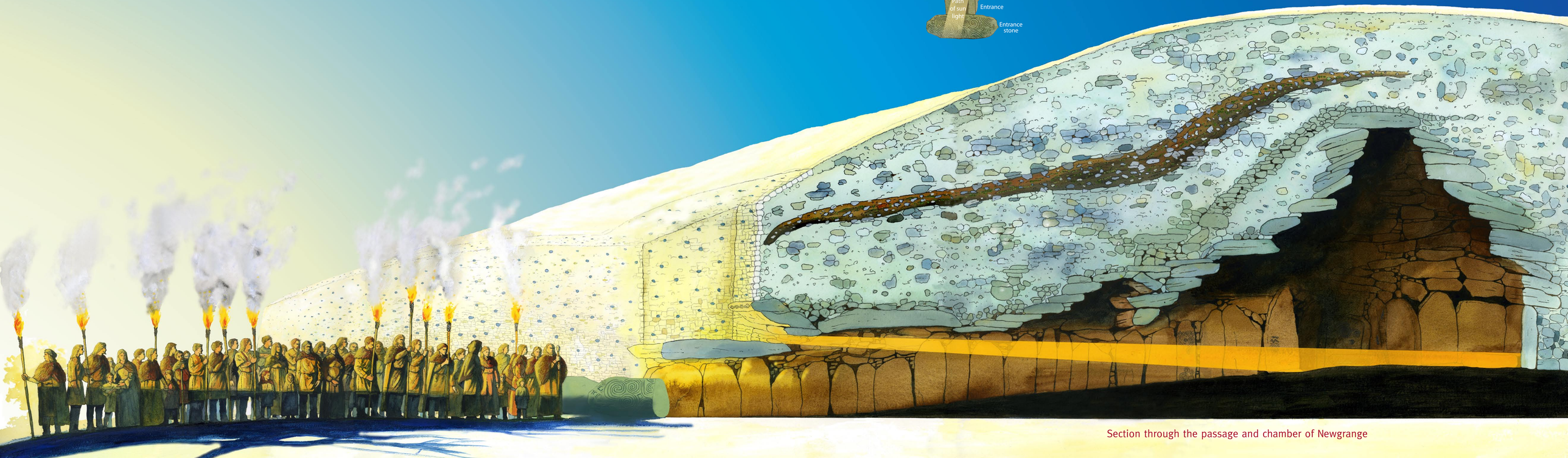
Over the entrance of the passage is a small opening known as the roof box. During the Winter Solstice, i.e. the shortest day of the year, around December 21st the light of the rising sun enters the chamber through this opening. The chamber is illuminated for 17 minutes from 8.58 a.m. (G.M.T.). In 1967 Professor O'Kelly was the first person in modern times to witness this event.



The builders of Newgrange planned this alignment deliberately and it must have had great significance for them. It marks the start of a new solar year and must have been a time of great hope and celebration; a triumph of light over darkness and life over death.



A burial at Newgrange c.3200BC. The cremated remains of the dead were placed in the basin stones within the recesses of the chamber.



Section through the passage and chamber of Newgrange