The Square-tailed Kite Lophoictinia isura is an uncommon Australian endemic raptor that has been infrequently recorded breeding in Victoria. We review the historic record of the species for the Bendigo area of north-central Victoria and show that it has increased markedly since about 2000. A survey for nests in remnant box-ironbark forest during the 2014–15 breeding season revealed ten concurrently-active nests and 34 old nests. Density was estimated to be 10.8 pairs per 1000 square kilometres overall and 25.8 pairs per 1000 square kilometres in forest blocks. Nine of ten nests fledged young, yielding a minimum of 1.6 and maximum of 1.8 fledglings per nest. These densities and success rates are as high as or higher than previously reported for the species, showing that the Bendigo forests provided outstanding habitat for the species at least in the study year. We suggest that optimal forest habitat for the species may be as much defined by the scarcity of predators of kite nestlings and adults, and of territorial competitors, as the abundance of food. Notes are provided on nests and kite behaviour. We briefly explore two hypotheses for the species' increase, both of which involve or may involve changes to the abundance of aggressive or competing raptor species.