Facultatively social insects offer a unique opportunity to study the role that kin selection may play in social group formation. The eastern carpenter bee, *Xylocopa virginica*, can nest solitarily or socially and displays multiple reproductive strategies in social nests. Large primary females dominate foraging and oviposition, but many die before the end of the brood production phase of the colony cycle. Secondary females, which are also large, forage and lay eggs at a reduced rate, and often attempt to relocate to other nests where reproductive opportunities are higher. Small tertiary females neither forage nor lay eggs but remain in the nest and may live for two years. We test two hypotheses generated under the framework of kin selection to examine the role of each reproductive strategy. First, we predicted that social females should often be sisters who overwintered together in their natal nest. Using nine microsatellite loci, we found high relatedness in small colonies containing only two females, but that relatedness was lower in larger groups. Second, we predicted that the extent of helping behaviour by secondaries and tertiaries should correlate with their relatedness to the primary female. Microsatellite analyses indicate primaries and tertiaries are more closely related than primaries and secondaries. Intensive behavioural observations show that tertiaries are the main helpers, guarding the nest from potential usurpers. In contrast, secondary females contribute little to the colony. Moreover, when primary females are experimentally removed from the nest, a secondary immediately begins to forage, while a tertiary does not. Thus, in *X. virginica*, the degree of helping behaviour exhibited by subordinate females correlates with their relatedness to dominant egg-layers, as predicted under kin selection. This creates a novel social dynamic in which related subordinates help the dominant, whereas unrelated subordinates either do not help, or actively compete for reproductive opportunities.