Weeds on the roadside today are the potential weeds of crop tomorrow. A GRDC funded survey determined the incidence and density of roadside summer weeds in the Western Australian (WA) Grainbelt from February to April 2015. Sites were selected approximately every 10 km, where weeds were visible on the roadside. At each site, weed species were identified along a 20–50 m long transect. The survey identified 91 species at 1138 sites evenly distributed throughout the Grainbelt and 26 weed species with a total frequency of greater than 1%. The most common species were African lovegrass, fleabane, windmill grass and wild radish with a frequency of 11, 9, 7 and 6% respectively. African lovegrass was evenly distributed throughout the regions of Grainbelt. Fleabane incidence was the greatest in the northern agricultural region. Windmill grass was more prevalent in the central and south-east agricultural regions. Wild radish was most prevalent in the northern and central agricultural regions. Couch and stinking lovegrass were also major weeds in the northern and southern agricultural zones of WA. Feathertop Rhodes grass was common to the central and southern agricultural regions. Other invasive weeds such as matricaria, stinkwort, roly poly, prickly paddy melon and prickly lettuce were also prevalent on the WA roadside with greater frequency in the central agriculture region. This survey highlights those weed species that are spreading and may require further research/development of management programs for optimal control.

**Keywords**  Roadside survey, emerging summer weed, incidence, density, distribution.