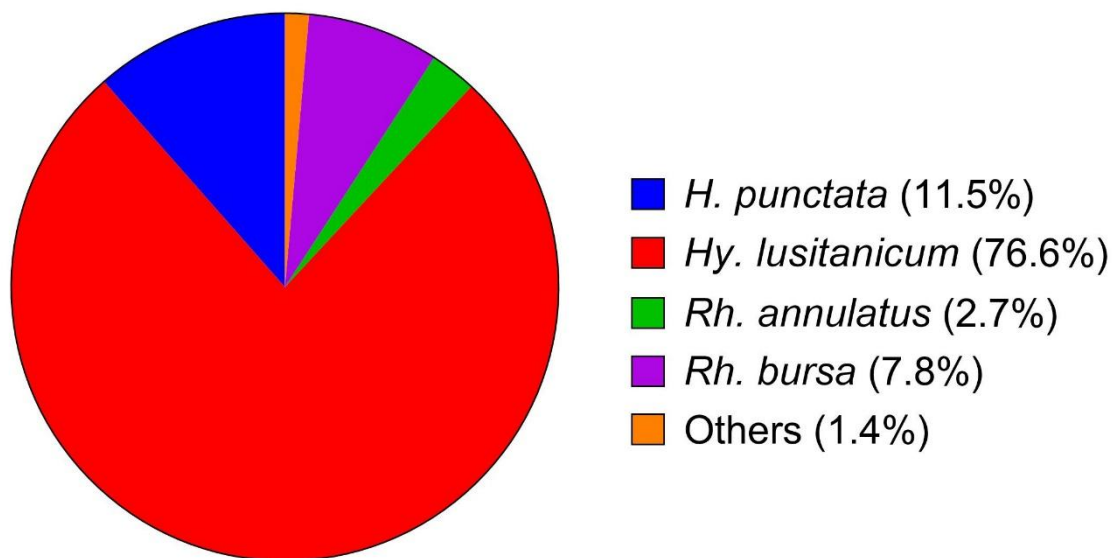


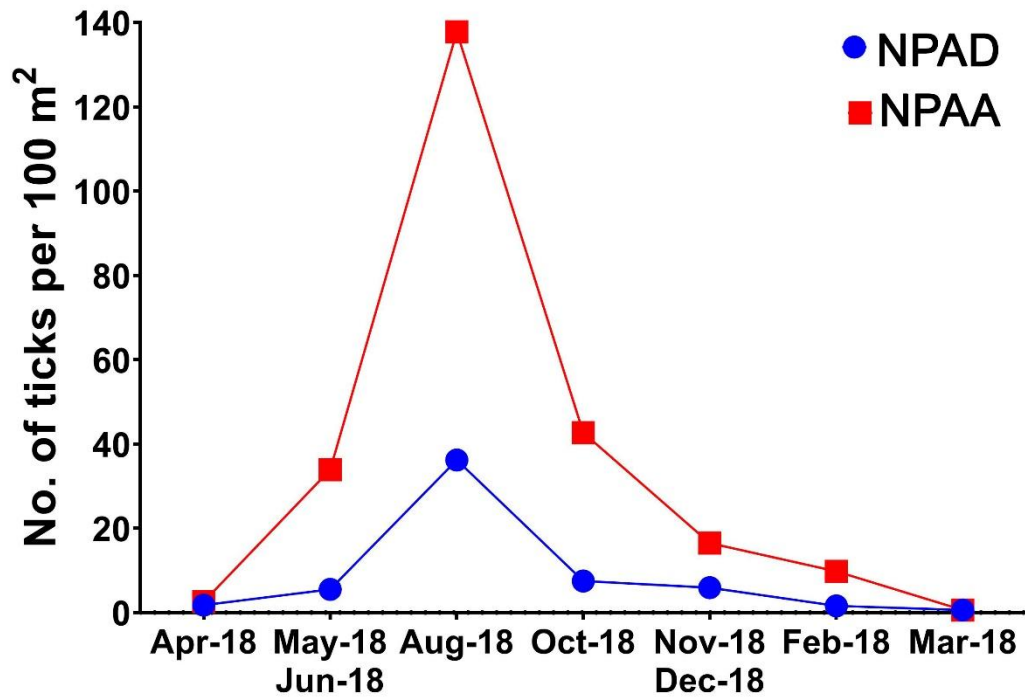
**Total=1044**

**Supplementary figure 1:** Abundance of tick species captured in the Natural Protected Area of Doñana from April 2018 to March 2019. 'Others' correspond to species with a prevalence <1%, specifically to *Ixodes ricinus* (0.2%) and *Rhipicephalus pusillus* (0.2%). *D.*: *Dermacentor*; *H.*: *Haemaphysalis*; *Hy.*: *Hyalomma*; *Rh.*: *Rhipicephalus*.

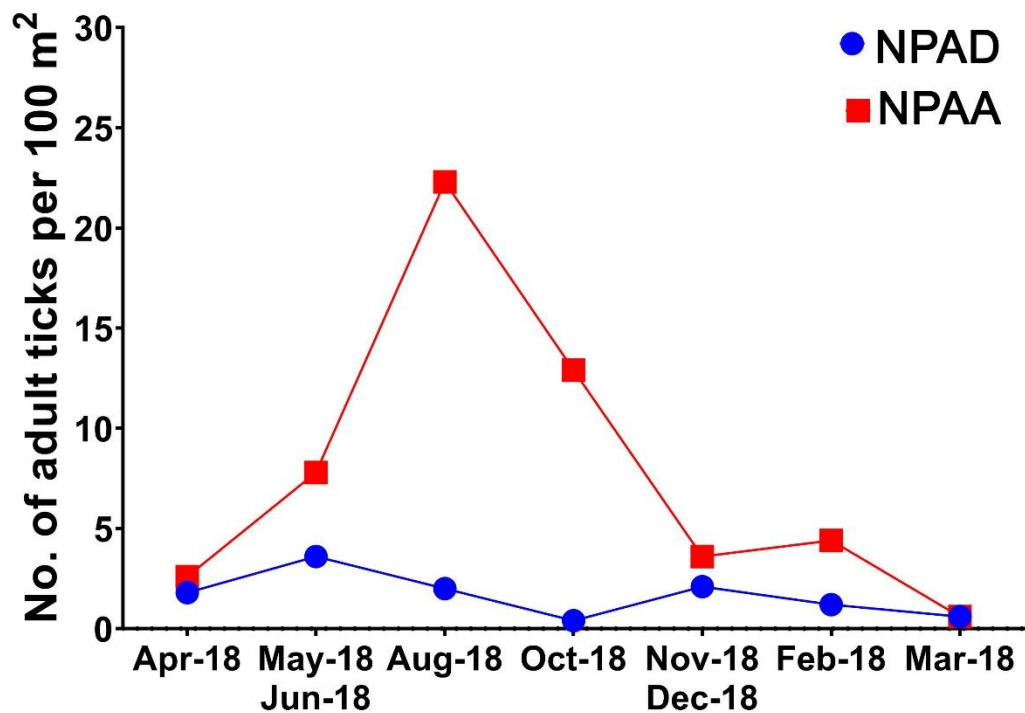


**Total=3682**

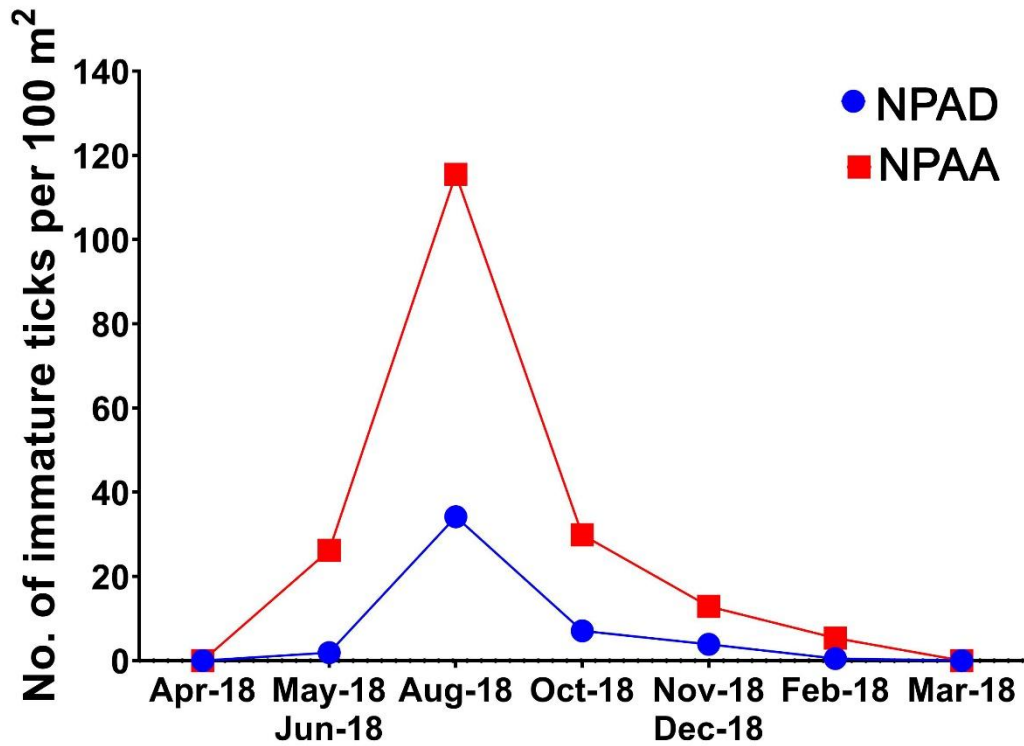
**Supplementary figure 2:** Abundance of tick species captured in the Natural Protected Area of Los Alcornocales from April 2018 to March 2019. 'Others' correspond to species with a prevalence <1%, specifically to *Dermacentor marginatus* (0.1%), *Ixodes acuminatus* (0.03%), *Ixodes ricinus* (0.2%), *Rhipicephalus pusillus* (0.2%) and *Rhipicephalus sanguineus* sensu lato (0.9%). *H.*: *Haemaphysalis*; *Hy.*: *Hyalomma*; *Rh.*: *Rhipicephalus*.



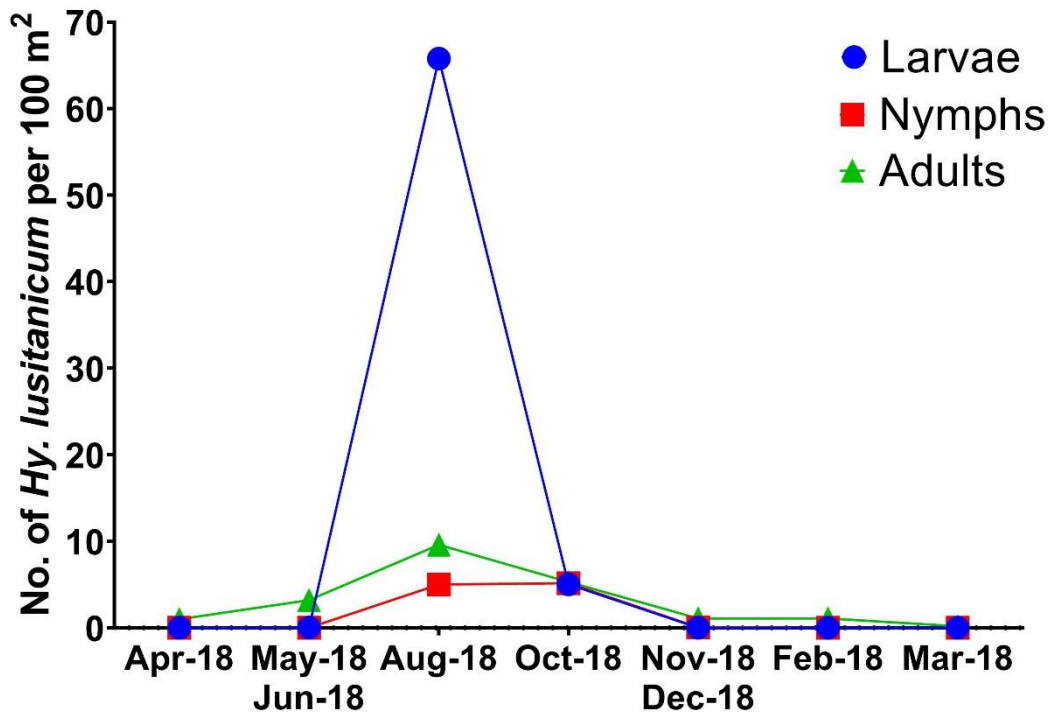
**Supplementary figure 3:** Abundance of tick specimens in the seven samplings performed in the Natural Protected Area of Doñana (NPAD) and in the Natural Protected Area of Los Alcornocales (NPAA).



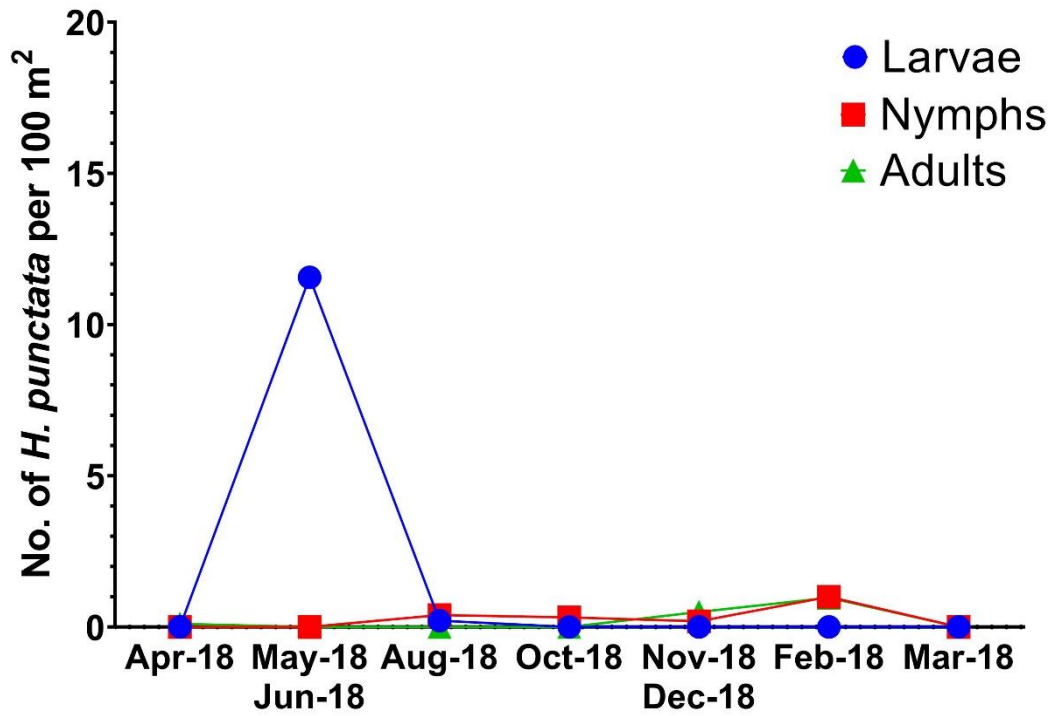
**Supplementary figure 4:** Abundance of adult tick specimens in the seven samplings performed in the Natural Protected Area of Doñana (NPAD) and in the Natural Protected Area of Los Alcornocales (NPAA).



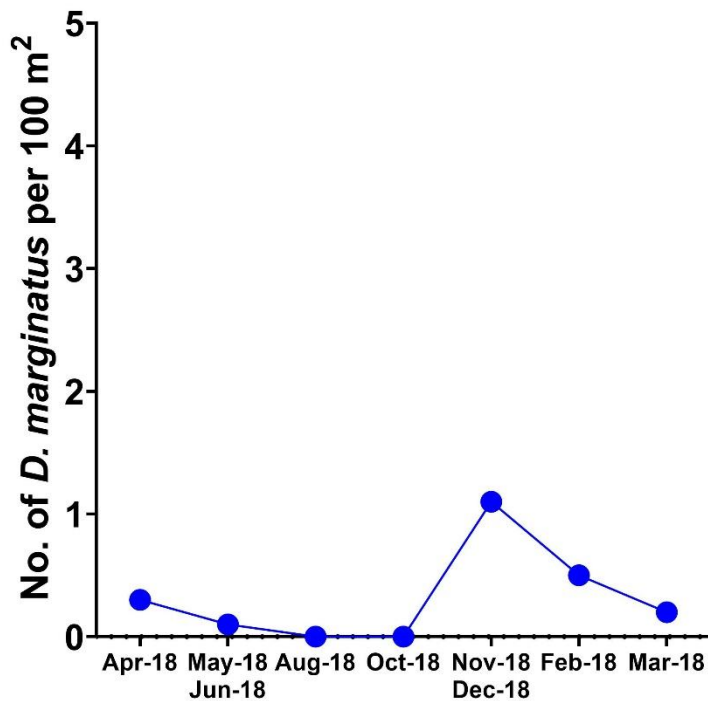
**Supplementary figure 5:** Abundance of immature tick specimens in the seven samplings performed in the Natural Protected Area of Doñana (NPAD) and in the Natural Protected Area of Los Alcornocales (NPAA).



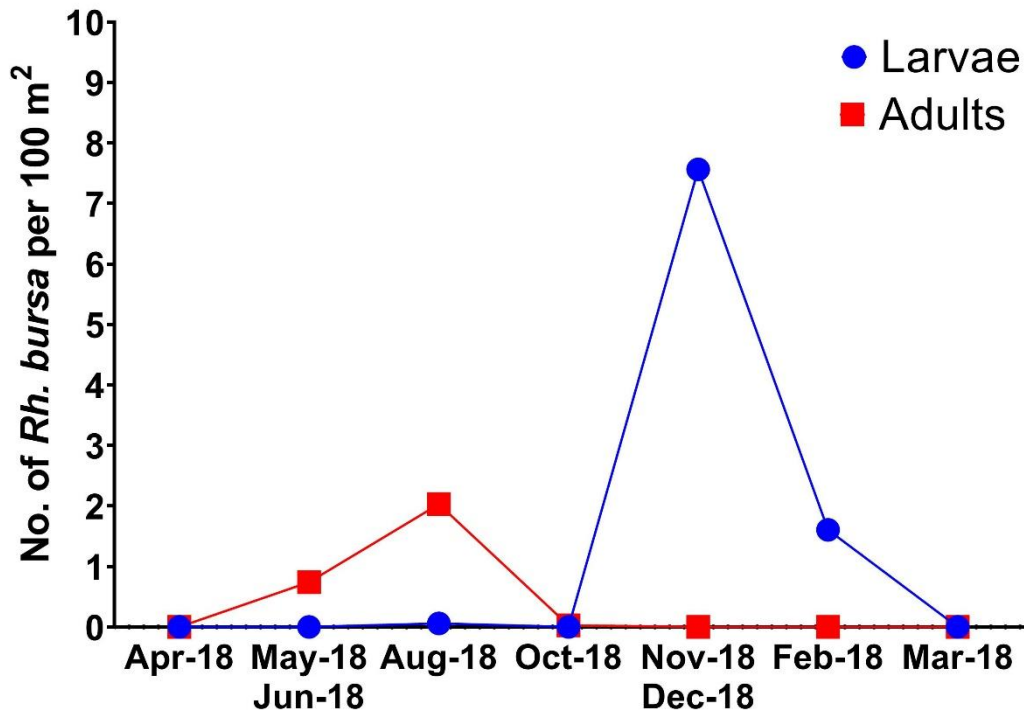
**Supplementary figure 6:** Abundance of *Hyalomma lusitanicum* tick specimens in the seven samplings performed in the Natural Protected Area of Doñana (NPAD) and in the Natural Protected Area of Los Alcornocales (NPAA).



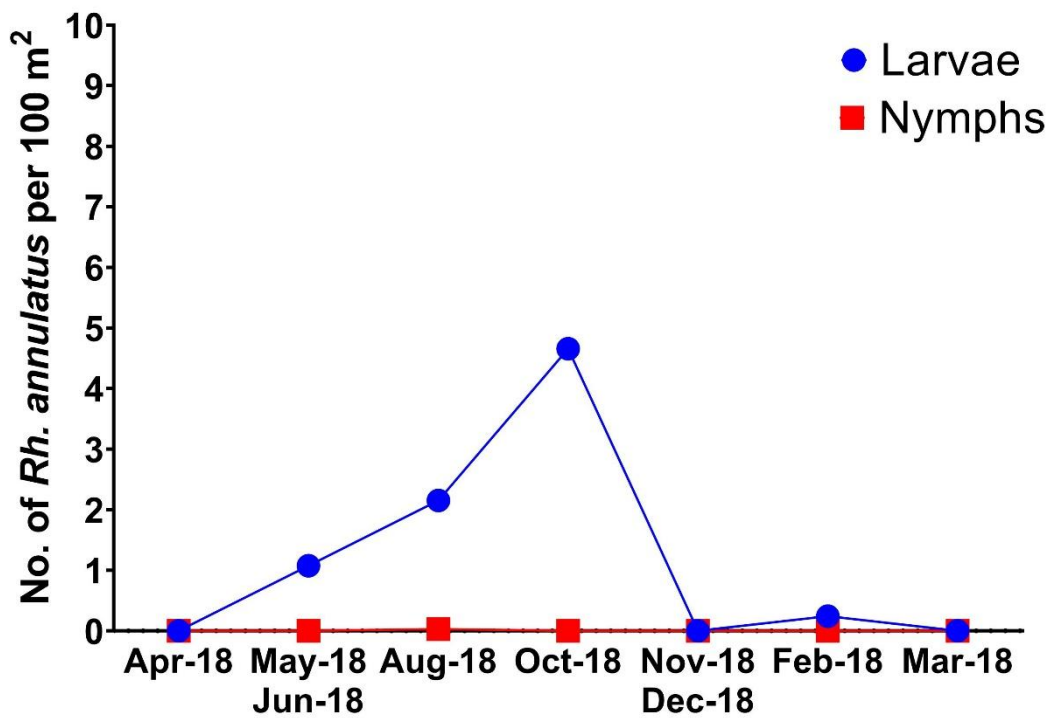
**Supplementary figure 7:** Abundance of *Haemaphysalis punctata* tick specimens in the seven samplings performed in the Natural Protected Area of Doñana (NPAD) and in the Natural Protected Area of Los Alcornocales (NPAA).



**Supplementary figure 8:** Abundance of adult specimens of *Dermacentor marginatus* tick specimens in the seven samplings performed in the Natural Protected Area of Doñana (NPAD) and in the Natural Protected Area of Los Alcornocales (NPAA).



**Supplementary figure 9:** Abundance of *Rhipicephalus bursa* tick specimens in the seven samplings performed in the Natural Protected Area of Doñana (NPAD) and in the Natural Protected Area of Los Alcornocales (NPAA).



**Supplementary figure 10:** Abundance of *Rhipicephalus annulatus* tick specimens in the seven samplings performed in the Natural Protected Area of Doñana (NPAD) and in the Natural Protected Area of Los Alcornocales (NPAA).