**Table 1.** Summary table presenting details on each of the comparative studies summarised in the main text. The table lists the species name (scientific and common name), class and order to which the species belongs to, each species invasion status, the population from which test animals were sourced and from where the source population came from, the cognitive task used in each study, if the study was conducted in the laboratory or in the wild, what the overall results were and the reference for each study.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Common name** | **Class - order** | **Status** | **Source population** | **Source** | **Cognitive test** | **Test location** | **Overall result** | **Reference** |
| **Invertebrates** |
| *Carcinus maenas* | Green crab | Malacostraca - Decapoda | Invasive | Invasive | Wild | Spatial memory | Lab | *C. maenas* learnt the location while *C. sapidus* did not. Same memory | Roudez et al. 2008 |
| *Callinectes sapidus* | Blue crab | Non-invasive | Native |
| *Carcinus maenas* | Green crab | Malacostraca - Decapoda | Invasive | Invasive | Wild | Spontaneous alternation | Lab | *C. maenas* performed more spontaneous alternations and above chance level | Ramey et al. 2009 |
| *Callinectes sapidus* | Blue crab | Non-invasive | Native |
| *Orconectes rusticus*  | Rusty crayfish | Malacostraca - Decapoda | Invasive | Invasive | Wild | Memory of trained predator cues | Lab | *O. rusticus* showed predator avoidance for up to 4 weeks while *O. virilis* for only up to 2 weeks | Hazlett et al. 2002 |
| *Orconectes virilis*  | Virile crayfish | Invasive | Native |
| *Procambarus clarkii*  | Red swamp crawfish | Invasive | Invasive | *P. clarkii* showed predator avoidance behaviour for 3 weeks when trained for 24h. Otherwise both species showed memory only for 2 weeks |
| *Austropotamobius pallipes* | White-clawed crayfish | Non-invasive | Native |
| *Drosophila subobscura* | Fruit fly | Insecta - Dipteara | Invasive | Invasive | Bred from wild source | Learning of oviposition sites | Lab | Both groups showed learning but the invasive flies had higher fecundity | Foucaud et al. 2016 |
| Native |
| **Vertebrates** |
| *Lampropholis delicata* | Delicate skink | Reptilia - Squamata | Invasive | Native | Wild | Discrimination learning (foraging) | Lab | Both species did not learn to locate food within the maze | Bezzina et al. 2014 |
| *Lampropholis guichenoti* | Common garden skink | Non-invasive | Native |
| *Acridotheres tristis* | Common myna | Aves - Passeriformes | Invasive | Invasive | Wild | Problem-solving task (foraging) | Lab | Common mynas performed better in all problem-solving tasks compared to noisy miners | Griffin and Diquelou 2015 |
| *Manorina melanocephala* | Noisy miner | Non-invasive | Native |
| *Corvus coronoides* | Australian raven | Aves - Passeriformes | Non-invasive | Native | Wild | Problem-solving task (foraging) | Wild | Australian ravens performed the best followed by common mynas and European starling. Australian magpies showed medium high problem-solving ability while all other species showed little problem-solving ability. Motor flexibility predicted solving success | Diquelou et al. 2015 |
| *Cracticus tibicen* | Australian magpie | Invasive | Native |
| *Grallina cyanoleuca* | Magpie lark | Invasive | Native |
| *Acridotheres tristis* | Common myna | Invasive | Invasive |
| *Manorina melanocephala* | Noisy miner | Non-invasive | Native |
| *Sturnus vulgaris* | European starling | Aves - Columbiformes | Invasive | Invasive |
| *Ocyphaps lophotes* | Crested pigeon | Non-invasive | Native |
| *Sciurus carolinensis* | Grey squirrel | Mammalia - Rodentia | Invasive | Invasive | Wild | Spatial memory | Wild | At 20 days after training grey squirrels showed memory of the cache location while red squirrels did not | MacDonald 1997 |
| *Sciurus vulgaris* | Red squirrel | Non-invasive | Native |
| *Sciurus carolinensis* | Grey squirrel | Mammalia - Rodentia | Invasive | Invasive | Wild | Problem-solving task (foraging) | Wild | More grey squirrels solved the easy task and they were faster than red squirrels. In the hard task, again, more grey squirrels were successful but red squirrels were more efficient | Chow et al. 2018 |
| *Sciurus vulgaris* | Red squirrel | Non-invasive | Native |