Lasius neglectus **System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae

Common name invasive garden ant (English)

Synonym

Similar species *Lasius austriacus, Lasius turcicus*

Summary Lasius neglectus is a recent arrival in Europe. Some of its populations have attained pest status but on other sites, the ant is still in an arrested state, perhaps in the lag-phase, lacking the major characteristics of invaders. Its negative effects are caused by the enormous numbers of ants tending aphids on trees and occupation of electrical conduits in homes and gardens.

view this species on IUCN Red List

Species Description
Lasius neglectus, though known to be present at a location in Budapest, Hungary, was only described in 1990 (Van Loon *et al.* 1990). It is a member of the sub-family Formicinae. The length of the worker, queen and male are 2.5-3mm (worker), 5.5-6mm (queen), 2.5mm (male); the mandibles are 7-toothed; hairs are lacking on the scape (first segment of antenna) and usually on the legs. Their colour is yellowish-brown with the thorax somewhat paler. The live weight of the worker is 0.65-0.80mg and the queen, 6.8-9.6mg. Espadaler and Bernal (2004) observed that \"the female is immediatly recognisable within the European *Lasius* by its comparatively reduced size and proportionately smaller gaster (swollen part of abdomen), as compared with the thorax. The male is the smallest within the European *Lasius* (s.str.) species\".
Polygyny in the nest (the presence of more than one functional queen), and the enormous numbers of workers travelling up and down trees is also a characteristic of the species.

Notes
Lasius neglectus is a poorly known species living in huge supercolonies with no apparent within-colony boundaries, and with a highly polygynous kin-structure (Van Loon *et al.* 1990; Boomsma *et al.* 1990)

Lifecycle Stages
Lifecycle stages (data from one colony in north-east Spain): eggs (from April to October), larvae (all year around), worker pupae (May, June, September, October), sexuals pupae (May, June), winged sexuals (May, June).

Habitat Description
In Europe *Lasius neglectus* is found in urbanised areas, from city streets to semi-urban lots with some natural vegetation. Trees are a key resource for the ant. In Asia Minor it is found in natural steppe habitats (Seifert, 2000).

Reproduction
The colony grows by budding, involving the displacement of queens with some workers at short distances (a few metres). In laboratory studies, isolated queens have also been shown to be able to found new colonies, although it is not known if this possibility exists under natural conditions. The carbohydrate content of newly mated queens is consistent with the observed loss of mating flight of this species although the relative wing area indicates that *L. neglectus* queens should be able to fly.

Nutrition
Feeding is mainly based on sugary foods (aphid honeydew, nectar, vegetal juices). In spring the ants look for aphids at the base of herbs and small vegetation, where the ant constructs temporary earth shelters. In summer, when tree aphids are abundant, the ants shift to this nearly ubiquitous resource.

General Impacts
Lasius neglectus may invade the interior of houses and occupy electrical conduits, causing short-circuits or damage to electro-mechanical devices. Outdoors, it nests at the base of plants and attends aphids on trees, usually producing negative effects. As a result of the ants protecting aphids and \"milking\" them for their honeydew it causes honeydew to be produced in large quantities, in turn causing sooty mould to grow on leaves.
Not all populations seem to be invasive, in Spain only three out of eleven populations have been denounced as damaging or invasive. This is probably due to climatic constraints, especially dryness during the Mediterranean summer.

Management Info
Preventative measures: The Pacific Ant Prevention Programme is a proposal prepared for the Pacific Plant Protection Organisation and Regional Technical Meeting for Plant Protection. This plan aims to prevent the red imported fire ant and other invasive ant species with economic, environmental or social impacts from establishing within or spreading between countries in the Pacific.
A detailed pest risk assessment for the eight species ranked as having the highest potential risk to New Zealand (*Anoplolepis gracilipes*, *Lasius neglectus*, *Monomorium destructor*, *Paratrechina longicornis*, *Solenopsis geminata*, *Solenopsis richteri*, *Tapinoma melanocephalum*, *Wasmannia auropunctata*) was prepared as part of 'The invasive ant risk assessment project', *Harris et al.* 2005., for Biosecurity New Zealand by Landcare Research. *Lasius neglectus* scored as a high-risk threat to New Zealand. The Invasive ant risk assessment for *Lasius neglectus* can be viewed at *Lasius neglectus risk assessment*. Please see *Lasius neglectus information sheet* for more information on biology, distribution, pest status and control technologies.
Integrated Pest Management: Usual measures against domestic ants are not expected to be effective. The enormous numbers of ants that integrate in the supercolonies are to be controlled by an Integrated Pest Management (IPM) strategy, involving both chemical control on trees and soil, physical management of trees (cutting branches in contact with buildings) and limiting irrigation as much as possible (Rey and Espadaler, 2005).
Please follow this link for more detailed information on the management of the *Lasius neglectus* compiled by the ISSG.

Pathway
Movement of potted plants, turf peat, soil from construction.

Principal source: Van Loon *et al.* 1990; Boomsma *et al.* 1990; Seifert, 2000; Espadaler & Rey, 2001; Espadaler and Bernal, 2004

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[1] IRAN, ISLAMIC REPUBLIC OF
[5] KYRGYZSTAN
[1] POLAND
[14] SPAIN

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Harris, R.; Abbott, K.; Barton, K.; Berry, J.; Don, W.; Gunawardana, D.; Lester, P.; Rees, J.; Stanley, M.; Sutherland, A.; Toft, R. 2005: Invasive ant pest risk assessment project for Biosecurity New Zealand. Series of unpublished Landcare Research contract reports to Biosecurity New Zealand. BAH/35/2004-1.
Summary: The invasive ant risk assessment project, prepared for Biosecurity New Zealand by Landcare Research, synthesises information on the ant species that occur in New Zealand (native and introduced species), and on invasive ants that pose a potential threat to New Zealand.
There is a great deal of information in this risk assessment on invasive ant species that is of global interest, including; biology, distribution, pest status, control technologies.
The assessment project has five sections.1) The Ants of New Zealand: information sheets on all native and introduced ants established in New Zealand 2) Preliminary invasive ant risk assessment: risk scorecard to quantify the threat to New Zealand of 75 ant species. 3) Information sheets on invasive ant threats: information sheets on all ant species scored as medium to high risk (n = 39). 4) Pest risk assessment: A detailed pest risk assessment for the eight species ranked as having the highest potential risk to New Zealand (*Anoplolepis gracilipes*, *Lasius neglectus*, *Monomorium destructor*, *Paratrechina longicornis*, *Solenopsis geminata*, *Solenopsis richteri*, *Tapinoma melanocephalum*, *Wasmannia auropunctata*) 5) Ranking of high risk species: ranking of the eight highest risk ant species in terms of the risks of entry, establishment, spread, and detrimental consequences.
NB. The red imported fire ant (*Solenopsis invicta*) is considered to be the worst ant pest in the world. However, *Solenopsis invicta* was specifically excluded from consideration in this risk assessment as this species has already been subject to detailed consideration by Biosecurity New Zealand
(This invasive ant pest risk assessment was funded by Biosecurity New Zealand and Foundation for Research, Science and Technology. Undertaken by Landcare Research in collaboration with Victoria University of Wellington and Otago Museum)
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Summary: First intent to limit this pest. In two consecutive years, chemicals were applied on tree trunks and canopies. In addition to soil injections and in-house ant baits, a satisfactory control was reached.
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