



















One of the most studied social insects is the ant. As for the other social insects, such as the bee or termite, there are at least two scales in the system: at the level of the individual ant, the behaviour is simple (though sometimes apparently random) while at the level of the colony one sees cooperative phenomena which is self-organised. That is, without a preconceived global plan or internal supervision, ants are able to construct elaborate nests and forage for food apparently using only simple local interactions among individuals. In the experiment described in Ref.[11], two identical food sources were placed equidistant from an ant nest. The food supplies were constantly replenished so that they remained the same. The distribution of ants between the two sources was then analysed and compared with theory. It was known that when an ant finds food, it lays a chemical (pheromone) trail back to the nest. That trail can be used by the same ant or others to guide them back to the food source. Thus ants leaving the nest are likely to follow the trails created by earlier ants, leading to self-reinforcement. Thus theoretically one would expect that the long term behaviour of the foraging ants would be largely determined by the actions of the first few, implying that the proportion of ants visiting the two food sources would remain stable. However in reality the proportion of ants visiting the two sites fluctuates, showing not only expected small variations but also occasional large and rapid swings. A better theoretical model to explain the ant's behaviour is the following [11]: An ant leaving the nest follows one of three rules,

- 1. It can revisit the food source it last encountered,
- 2. It can be recruited by a returning ant to visit the other source,









Manager StainbkRLoc

From:

Internal Comms

Sent:

08 July 2008 12:26

Subject:

ACTION - remove and destroy, Sainsbury's Strong Dry Cider 3ltr UPDATE (STORE

SPECIFIC Sherburn depot stores)

immediate action - remove and destroy

Queries to Michael Luck, 0845 603 6296 Option 1, Option 3, Option 2

SKU:

1067286

dept n°/sub-category: commodity n°:

351

pack size:

714

product description:

Sainsbury's Strong Dry Cider 3ltr

specific date codes:

19/03/09

supplier code:

40061 (D0061) (Do not use this to identify product)

reason:

Quality Fault (Poor Taste)

claim no:

466

This Red Alert was originally issued on Thursday 3rd July, but Sherburn depot have been issuing affected stock up to and including deliveries made on Tuesday 8th July. Please recheck your stocks. Sorry for any inconvenience this may have caused.

actions (RSS stores)

1. remove and destroy the above product

2. check commodity enquiry screen for any imminent deliveries that may need to be destroyed

3. claim for product destroyed using the 'product withdrawals' function within 7 days of this message



Sometimes when a seahorse wants to move, it does not bother to swim; it just attaches itself to a piece of floating seaweed and drifts with the current.

