Rodent traps

Field of the Invention

The present invention concerns rodent traps. More particularly, but not exclusively, the invention concerns rodent traps comprising a kill mechanism arranged to kill a rodent, and a storage area into which a rodent corpse passes after the rodent has been killed by the kill mechanism.

Background of the Invention

It is common for rodent traps to be checked only periodically, for example monthly. A downside of this is that rodents that have been caught can remain in the trap for a long period before being removed. This reduces the rate at which rodents can be caught by the trap, as until a rodent corpse has been removed and the trap reset, no further rodents will be caught. In addition, in the period before the rodent corpse is removed it can decompose, causing hygiene and odour issues.

The present invention seeks to provide a rodent trap that solved or mitigated some or all of the above-mentioned problems. Alternatively and/or additionally, the present invention seeks to provide an improved rodent trap.

Summary of the Invention

In accordance with a first aspect of the invention there is provided a rodent trap comprising:

a trigger arranged to be triggered by a rodent;

a kill mechanism arranged to kill a rodent in response to the trigger being triggered by the rodent, the kill mechanism comprising an impactor arranged to strike the rodent to kill it, and a shroud, and being arranged to kill a rodent when the head of the rodent is within the space formed by the shroud, the shroud being

configured and dimensioned such that the head of the rodent is maintained in position and orientation within the shroud while the rodent is killed by the impactor such that the rodent is killed by neck shear;

a trapdoor positioned to a side of to the kill mechanism, having a closed position and an open position;

a storage area positioned on the other side of the trapdoor to the kill mechanism;

wherein the rodent trap is arranged such that when a rodent is killed by the kill mechanism, the rodent corpse is pushed through the trapdoor into the storage area by the impactor.

By having a trapdoor adjacent to the kill mechanism through which the rodent corpse passes, once a rodent has been killed the rodent corpse can remain in the storage area, allowing the kill mechanism to be used on further rodents without the rodent corpse first needing to be removed by an operator.

Preferably, the trapdoor is biased to return to the closed position. In this way, the rodent corpse can travel through the trapdoor into the storage area following the rodent being killed by the kill mechanism, and the trapdoor then return to the closed position. The trapdoor may be biased by a spring, for example. Advantageously, the trapdoor is biased only by gravity. This allows the use of springs in the rodent trap to be avoided, so that it does not fall with “spring trap” legislation.

Advantageously, the trapdoor comprises a latch mechanism arranged to keep the trapdoor closed before a rodent has been killed by the kill mechanism, and to release the trapdoor after a rodent has been killed by the kill mechanism. In particular where the trapdoor is positioned beneath the kill mechanism, this allows the trapdoor to be stepped upon by a rodent prior to them being killed without the trapdoor opening, so allowing the trapdoor to act as a floor before the rodent is killed.

Preferably, the trigger comprises bait to attract a rodent. Alternatively, the trigger may comprise a lure.

The rodent trap may further comprises a reset mechanism arranged to reset the kill mechanism after a rodent has been killed by the kill mechanism. Alternatively, the kill mechanism may be self-resetting.

Advantageously, the trapdoor is positioned beneath the kill mechanism, the storage area is positioned beneath the trapdoor, and the rodent trap is arranged to allow the rodent corpse to fall through the trapdoor into the storage area following

Claims

1. A rodent trap comprising:

a trigger arranged to be triggered by a rodent;

a kill mechanism arranged to kill a rodent in response to the trigger being triggered by the rodent, the kill mechanism comprising an impactor arranged to strike the rodent to kill it, and a shroud, and being arranged to kill a rodent when the head of the rodent is within the space formed by the shroud, the shroud being configured and dimensioned such that the head of the rodent is maintained in position and orientation within the shroud while the rodent is killed by the impactor such that the rodent is killed by neck shear;

a trapdoor positioned to a side of to the kill mechanism, having a closed position and an open position;

a storage area positioned on the other side of the trapdoor to the kill mechanism;

wherein the rodent trap is arranged such that when a rodent is killed by the kill mechanism, the rodent corpse is pushed through the trapdoor into the storage area by the impactor.

2. A rodent trap as claimed in claim 1, wherein the trapdoor is biased to return to the closed position.

3. A rodent trap as claimed in any preceding claim, wherein the trapdoor comprises a latch mechanism arranged to keep the trapdoor closed before a rodent has been killed by the kill mechanism, and to release the trapdoor after a rodent has been killed by the kill mechanism.

4. A rodent trap as claimed in any preceding claim, wherein the trigger comprises bait to attract a rodent.

5. A rodent trap as claimed in any preceding claim, further comprising a reset mechanism arranged to reset the kill mechanism after a rodent has been killed by the kill mechanism.

6. A rodent trap as claimed in any preceding claim, wherein the kill mechanism comprises a compressed-air powered bolt.

7. A rodent trap as claimed in any preceding claim, wherein the storage area comprises a removable bag into which the rodent corpse passes.

8. A rodent trap as claimed in any preceding claim, wherein the storage area comprises a preservative.

9. A rodent trap as claimed in any preceding claim, wherein the storage area comprises a fragrance.

10. A rodent trap as claimed in any preceding claim, wherein the storage area comprises a liquid absorbent.

11. A rodent trap as claimed in any preceding claim, wherein the storage area comprises a biocide.

12. A rodent trap as claimed in any preceding claim, wherein the storage area comprises a dispensing mechanism arranged to dispense a substance into the storage area.

13. A rodent trap as claimed in claim 12, wherein the dispensing mechanism is arranged to dispense the substance when the kill mechanism is activated.

14. A rodent trap as claimed in claim 12, wherein the dispensing mechanism is arranged to dispense the substance when the trapdoor is opened and/or closed.