





4. The wind gauge as defined in claim 2 wherein said pigmented thermoplastic particles have a fluorescent coloration.
5. The wind gauge as defined in claim 1 wherein the maximum particle size of said thermoplastic pigmented particles is approximately 0.4 to 0.5 micron.
6. The wind gauge as defined in claim 1 wherein the ratio of thermoplastic particles to silica particles is approximately 1 to 50.
7. The wind gauge as defined in claim 1 wherein said media includes a selected scent component.
8. A wind gauge comprising:
  - a container;
  - powder-like silica particles contained within said container; and
  - color-pigmented particles intermixed with said silica particles in said container;said container having means for dispensing said mixture of silica particles and color-pigmented particles outwardly from said container to form an airborne particulate emission which is visually observable to gauge windage conditions.
9. The wind gauge as defined in claim 8 wherein said powder-like silica particles comprise amorphous hydrophobic fumed silica.
10. The wind gauge as defined in claim 8 wherein said pigmented particles are of a fluorescent color.
11. The wind gauge as defined in claim 10 wherein the maximum size of said pigmented particles is approximately 0.4 to 0.5 micron.
12. The wind gauge as defined in claim 8 wherein the ratio of pigmented particles to silica particles is about 1 to 50.
13. The wind gauge as defined in claim 8 wherein at least some of said particles are scented.
14. A hunter's scent dispenser which emits a particulate cloud-like dispersion that is airborne under the influence of ambient wind, comprising:
  - a dispenser housing;
  - a quantity of fine, lightweight silica particles of sub-micron particle size disposed inside said housing, said silica particles being dispensable from said housing and being sufficiently buoyant to form a particulate cloud-like dispersion which remains airborne for a substantial interval under the influence of the wind;
  - a scent media in said housing, said scent being carried with said buoyant silica particles upon their dispensing from said housing, whereby said airborne silica particles and scent media provide a scent trail of long persistence; and

a plurality of fine, buoyant color-pigmented particles mixed with said silica particles as part of said cloud-like dispersion to thereby enhance visual determination of said scent trail.

15. The hunter's scent dispenser as defined in claim 14 wherein said silica particles comprise amorphous hydrophobic fumed silica.

16. The hunter's scent dispenser as defined in claim 14 wherein said scent media is absorbed by said silica particles.

17. The hunter's scent dispenser as defined in claim 14 wherein said pigmented particles have a fluorescent color to further enhance said visual determination.

18. The hunter's scent dispenser as defined in claim 14 wherein said pigmented particles comprises a thermoplastic material.

19. The hunter's scent dispenser as defined in claim 15 wherein said scent media comprises a deposit of viscous fluid disposed in said housing within said quantity of silica particles.

20. A method of gauging wind direction and velocity, comprising the steps of:

providing a plurality of silica particles of sufficiently small size to be buoyantly carried by ambient wind;

dispensing said silica particles as a buoyant cloud-like dispersion to be carried by said wind;

introducing color to said particles before dispensing them by using a plurality of color-pigmented particles, to provide a colored cloud-like dispersion of enhanced visibility; and

observing the direction and rate of travel of said cloud to gauge wind direction and velocity.

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*Description*

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## BACKGROUND OF THE INVENTION

The present invention relates to wind speed and direction gauging, and more particularly to use of lightweight particulate media for forming a floating cloud for this purpose.

Bow and rifle hunters, as well as other sports enthusiasts, have heretofore mainly had only makeshift methods and devices available to them for gauging wind speed and direction. This is particularly desirable for hunting purposes, while stalking or waiting in a blind for game, since game downwind from a hunter will avoid the hunter's position if the animals detect the hunter's scent. To avoid detection by the prey, hunters stalking animals attempt to monitor the wind and remain downwind therefrom. For bow hunters, in addition to gauging the general ambient conditions of wind speed and direction, it is also important to accurately gauge the particular windage that an arrow will experience when it is







bright orange pigmentation are readily visible to the hunter for great distances. The hunter watches cloud 16 as it is carried by the wind, and accordingly gauges the wind direction and speed as the wind carries the scent-impregnated cloud along. Additionally, because the cloud is visible for large distances and does not settle to the ground rapidly, hunter 12 may accurately gauge the windage that will affect arrow 26 as it travels toward deer 25 when the hunter shoots the arrow.

In accordance with the novel wind gauge method and apparatus provided herewith, a readily visible low-density particulate mixture and dispenser is provided which may be very conveniently carried by a hunter. The very low density of the amorphous hydrophobic fumed silica and thermoplastic particles facilitates the responsiveness of the cloud formed thereby to ambient wind currents. Accordingly, the particulate emission created by the mixture is carried at a velocity approximately equal to the wind velocity. A hunter observing the movement of cloud 16 may accurately determine the wind velocity and thus gauge the windage which will act on arrows shot from the blind. Additionally, the particulate emission is carried by the wind over large distances. A scent trail resulting from the powder as it gradually settles out of the air is long and attracts animals to the hunter from large distances. Because the particles carried by the wind may be essentially scentless, they will not themselves alert or frighten the game; alternatively, since they may be given a relatively strong, familiar scent, animals such as deer 25 will not detect the hunter's unfamiliar scent. Accordingly, animals may thus be attracted to the hunter's position.

Accordingly, it will be seen that a novel and highly useful device for hunters is provided in accordance herewith, by which the windage may be detected and a scent distributed along a scent trail leading to a hunter's blind. As may be appreciated, the preferred mixture disclosed and described herein is efficient and economic to manufacture, and is useable over an extended period, thereby facilitating its ownership and utilization by a hunter.

It is to be understood that the foregoing description of a preferred embodiment of the invention is provided for purposes of the description and illustration, and not as a measure of the invention, whose scope is to be defined by reference to the ensuing claims. Thus, while those skilled in the art may devise embodiments of the particular concepts presented in the foregoing illustrative disclosure which differs somewhat from the particular embodiment shown and described in detail herein, or may make various changes in structural details to the illustrated embodiment, all such alternative or modified embodiments which utilize the concepts of the invention and clearly incorporate the spirit thereof are to be considered as within the scope of the claims appended here below, unless such claims by their language specifically state otherwise.

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