A blind for hunting and observation of wildlife having a guide assembly and a door assembly moveably engaged with the guide assembly for movement between a concealed position and an open position. A brace pivotally attaches to the guide assembly for movement between a support position for support of the door assembly in the concealed position and a release position for release of the door assembly into the open position.
WILDLIFE HUNTING AND OBSERVATION BLIND

CROSS-REFERENCE TO RELATED APPLICATIONS

0001. This Non-Provisional application claims priority to U.S. Provisional Application Ser. No. 61/359,086 filed Jun. 28, 2010, and which is incorporated herein by reference.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH

0002. Not Applicable.

BACKGROUND OF THE INVENTION

0003. The present disclosure relates to a blind for hunting and wildlife observation, and more specifically, to a collapsible blind for hunting or observing fowl.

0004. A wildlife hunting and observation blind is a concealment device that allows a hunter or observer to view wildlife without detection, or at least a reduced chance of detection, by the wildlife. Various types of blinds are available for particular applications. For example, specialized types of blinds can be used to hunt or observe specific types of wildlife, such as, deer blinds and waterfowl blinds. Other types of blinds are designed for specific locations of use, such as, ground blinds, boat blinds, and pop-up blinds. In addition, blinds can be categorized by the intended duration of use, such as, permanent blinds, portable blinds, and temporary blinds.

0005. Regardless of the specific application, to be effective and practical for use, hunters and observers want blinds with features including, but not limited to: a clear viewing of wildlife, the ability to camouflage with various surroundings, quiet operation, minimal motion during use, quick opening, at least some protection from inclement weather, portability, size, ease of set-up, comfort, safety, and affordability. Previous blind designs have failed to incorporate a large number of these features together in a single blind, in part because of the features contrasting nature. Generally, enhancing one particular feature can detract from another feature, making it difficult to provide a blind with numerous features. For example, a blind that provides a enhanced view of wildlife may detract from the blinds ability to camouflage with its surroundings. Consequently, previous blind designs are limited to specialized applications and include limited features.

0006. Therefore, there is a long-felt need for a hunting and observation blind that is applicable in a wide variety of applications and includes many features.

DESCRIPTION OF THE DRAWINGS

0007. In the accompanying drawings which form part of the specification:

0008. FIG. 1A is a perspective view of a blind in a concealed position;

0009. FIG. 1B is a perspective view of the blind in an open opposition;

0010. FIG. 2 is an enlarged perspective view of the blind in the concealed position;

0011. FIG. 3 is an enlarged side view of the blind in the concealed position;

0012. FIG. 4 is a side view of the blind in a collapsed position;

0013. FIG. 5 is a rear perspective view of an alternate embodiment of a blind;

0014. FIG. 6 is a perspective view of mounting assembly frame;

0015. FIG. 7 is an enlarged view of a portion of the mounting system of FIGS. 5-6;

0016. FIG. 8 is alternate embodiment of an upper mount engaged with a guide rail.

0017. Corresponding reference numerals indicate corresponding parts throughout the several figures of the drawings.

DETAILED DESCRIPTION

0018. The following detailed description illustrates the claimed invention by way of example and not by way of limitation. The description clearly enables one skilled in the art to make and use the claimed invention, describes several embodiments, adaptations, variations, alternatives, and uses of the claimed invention, including what is presently believed to be the best mode of carrying out the claimed invention. Additionally, it is to be understood that the claimed invention is not limited in its application to the details of construction and the arrangements of components set forth in the following description or illustrated in the drawings. The claimed invention is capable of other embodiments and of being practiced or being carried out in various ways. Also, it is to be understood that the phraseology and terminology used herein is for the purpose of description and should not be regarded as limiting.

0019. As shown in FIGS. 1-4, an embodiment constructed in accordance with the present disclosure, generally referred to as a collapsible wildlife hunting and observation blind 10, includes a door assembly 12 that is moveably mounted to a guide assembly 14 for movement between a concealed position and an open position. A brace 16 supports the door assembly 12 in the concealed position and pivots to release the door assembly 12 into the open position. The blind 10 can be installed in multiple locations, including, but not limited to, a pit, a field, or a boat.

0020. The door assembly 12 includes a generally rectangular cover 18 secured to a doorframe 20 with an appropriate means, including, but not limited to, fasteners or adhesive (FIGS. 2-3). The cover 18 defines an opening 22 at an upper end 24 that is sized and shaped for viewing of wildlife by the hunter. In the embodiment of FIGS. 1-4, the opening 22 is generally rectangular and sized to minimize detection of the hunter by the wildlife. For instance, the opening 22 is preferably large enough for a hunter to place his head and an accessory, such as an animal call device. However, those skilled in the art will recognize that any size and shape opening can be used to allow viewing by the hunter while minimizing detection by the wildlife. The cover 18 is preferably made from a recyclable plastic, but can be made from any suitable material, including, but not limited to plastic, metal, or wood. Regardless of the material, the cover 18 is preferably strong enough so that when mounted to the doorframe 20 and installed on the guide assembly 14, the cover 18, and doorframe 20 can support the weight of at least one person or animal. In this way, the door assembly 12 enhances the safety of the blind 10 in case persons or animals inadvertently walk or stand on the door assembly 12, when the blind 10 is employed in an in-ground or pit blind application. Various types of camouflage, such as grass or loose foliage, can be detachably secured to the cover 18 using any appropriate means, such as, staples, fasteners, adhesives, and the like.

0021. The doorframe 20 includes a pair of side members 26 connected at their respective lower ends by a lower cross member 28 and at respective locations approximately below the opening 22 with an upper cross member 30. An engaging cross member 84 connected to lower cross member 28. In the...
embodiment of FIGS. 1-4, the doorframe 20 is preferably made from aluminum square tubing, for its lightweight, strength, and non-corrosive properties. However, any suitable material can be used, including but not limited to, plastic, wood, other metals, or other materials.

[0022] A guide member 32 pivotally attaches to approximately each corner of the doorframe 20. The guide member 32 is a generally rectangular block that defines a bore 34 sized and shaped to moveably engage the guide assembly 14. If desired, the bore 34 can be shaped to reduce friction between the guide member 32 and the guide assembly 14, such as rounding or tapering an inner face of the bore 34. Those skilled in the art will recognize that the guide member 32 can also be a bushing, bearing, journal, or other member that allows movement along the guide assembly 14. The guide member 32 defines a hole 35 extending along an upper portion for receiving a fastener 36, such as a pin. The fastener 36 extends through the hole 35 and attaches to the side member 26 of the doorframe 20, which allows the guide member 32 to pivot about the fastener 36. Preferably, the guide member 32 is constructed from nylon, for its ability to withstand cold temperatures, resistance to water, and non-corrosion properties. However, any suitable material can be used including, but not limited to, plastic, metal, or wood.

[0023] The guide assembly 14 includes a pair of guide rails 38 extending generally parallel between an upper mount 40 and a lower mount 42. Each rail 38 is generally L-shaped having an upright lower portion 44, an arcuate intermediate portion 46, and an inclined upper portion 48. The upper portion 48 is angled relative to the lower portion 44 to form an obtuse angle, preferably at about 110°, to allow movement by gravity of the door assembly 12 from the concealed position to the open position. However, any other angles can be used that allows movement by gravity of the door assembly 12 from the concealed position to the open position. Each rail 38 is preferably constructed from galvanized steel tubing for its strength, light weight, and corrosion resistant properties. However, those skilled in the art will recognize that other materials can be used, including, but not limited to, plastic, and other metals.

[0024] The lower mount 42 is a generally straight rod, preferably constructed from aluminum square tubing for its strength, light weight, and corrosion resistant properties. However, those skilled in the art will recognize that other materials can be used, including, but not limited to, plastic, and other metals. A peg 45 extends generally upwardly from about each end of the lower mount 42. Each peg 45 is sized to mate with a lower end of a respective rail 38. As shown in FIG. 1, the peg 45 inserts into the hollow interior of the galvanized steel tube that is the rail 38. A pair of tabs 47 extends generally perpendicularly and outwardly for attachment to the brace 16.

[0025] The upper mount 40 is a generally linear flat bar, preferably constructed from aluminum for its strength, light weight, and corrosion resistant properties. However, those skilled in the art will recognize that other materials can be used, including, but not limited to, plastic, and other metals. A pair of tabs 49 extend generally perpendicularly from respective ends of the bar 40. A pair of pegs 51 pivotally attach to respective tabs 49, such as with pins or other fasteners. Each peg 51 is sized to mate with an upper end of a respective rail 38. As shown in FIG. 1, the peg 51 inserts into the hollow interior of the galvanized steel tube that is the rail 38. In an alternative embodiment shown in FIG. 8, the upper mount 140 is a spring clip sized and shaped to detachably engage guide rails 38.

[0026] The rail 38 and guide member 32 should be sized to define a clearance gap, preferably of about 1/8" to about 1/4.

The gap allows foreign material, such as dirt, mud, rock, and water, to pass between the rail 38 and guide member 32 without impeding the movement of the door assembly 12 along the guide assembly 14 or significantly damaging the rail 38 or the guide member 32. This provides consistent performance and long life for the blind. Typically, bushings or bearings engaged with shafts having close tolerances are not tolerant to foreign matter and will damage or destroy the bushings or bearings.

[0027] While the present disclosure illustrates a guide assembly 12 with rails 38 and guide members 32, other embodiments can be used for movement of the door assembly, including, but not limited to, tracks, channels, slides, or other arrangements.

[0028] The brace 16 includes a pair of generally linear nested upper and lower members 50 and 52, preferably constructed from aluminum square tubing for its strength, light weight, and corrosion resistant properties. The lower member 52 pivotally attaches, such as with a fastener, to the tabs 47 of the lower mount 42. The upper member 50 has an interior sized to receive the lower member 52 and defines a plurality of holes to receive a fastener 54 for adjustable engagement with the lower member 52. In this way, the upper member 50 can move and secure to different locations along the lower member 52, thereby changing the overall length of the brace 16. A generally L-shaped bracket 56 attaches to the upper end of the upper member 50 for seating with the door assembly 12. A cushion 58 attaches to the seating face of the bracket 56 to reduce friction and noise during operation. A bumper 60 attaches to the lower mount 42, preferably made of neoprene, for its tolerance of cold temperatures and water resistant properties. However other materials can be used. When the door assembly 12 moves to the open position, the bumper 60 absorbs the impact to reduce the noise and shock on the door assembly 12.

[0029] The blind 10 can be moved between an operational position (FIG. 1) and a collapsed position (FIG. 4) for packaging, transporting, or storage. To collapse the blind 10, the upper mount 40 is detached from the rails 38 and the door assembly 12 is placed in the open position. Next, the rails 38 are pivoted inward until generally parallel with the lower mount 42. In this collapsed position, the blind 10 is generally flat, making it easy to package, transport, or store.

[0030] In operation, the blind 10 is positioned within a pit so that the inclined upper portion of the rails 38 is generally planar with the top of the pit. The hunter attaches any desired camouflage onto the cover 18. The hunter enters the chamber of the blind 10 and moves the door assembly 12 to the concealed position. The brace 16 is pivoted to the support position where the lower edge of the door assembly 12 seats against the bracket 56 (FIG. 1A). The length of the brace 16 is adjusted to position the door assembly 12 at the proper location. The hunter views wildlife through the opening 22. At the desired time, the hunter pivots the brace 16 into the release position, such as with a push of the hand (FIG. 1B). Gravity pulls the door assembly along the guide assembly 14 until the door strikes the bumper 60 and rests in the open position. The hunter now has a clear opening to shoot at any targets.

[0031] In an alternate embodiment, shown in FIGS. 5-7, the blind 10 includes a mounting assembly 70 for installation on a watercraft WC. The mounting assembly 70 includes a pair of generally c-shaped receivers 72 that mount to the watercraft WC, trough mounting plate 86, such as with fasteners 73, to define channels 74. A generally U-shaped frame 76 includes a crossbar 78 shaped and sized for attachment to the lower mount 42, such as with fasteners, with a generally vertical bar 80 extending upwardly from each end (FIG. 6). At
each upper end of the bars 80, generally L-shaped insert 82 extending forwardly and downwardly for removable engagement with respective receivers 72 (FIG. 7). Each insert 82 is sized and shaped to seat within the respective channels 74.

[0032] Changes can be made in the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense. For example, the blind 10 can be used in other applications, including, but not limited to, a boat or a upright position. In another alternate embodiment, a biasing element, such as a spring or bungee cord, can be attached between the door assembly 12 and the lower mount 42 or between the door assembly 12 and the upper mount 40 to bias the movement of the door assembly 12 between the open position and the concealed position.

What is claimed is:

1. A blind for hunting and observation of wildlife, comprising:
   a guide assembly;
   a door assembly moveably engaged with the guide assembly for movement between a concealed position and an open position; and
   a brace moveably attached to the guide assembly for movement between a support position for support of the door assembly in the concealed position and a release position for release of the door assembly into the open position.

2. The blind of claim 1, wherein the blind is configured for installation in a pit.

3. The blind of claim 1, the door assembly further comprising:
   a cover defining an opening shaped and sized for viewing of wildlife by an operator with reduced detection by the wildlife; and
   a guide member moveably attached between the cover and the guide assembly.

4. The blind of claim 1, wherein the guide assembly further comprises:
   an upper mount;
   a lower mount; and
   a guide rail extending between the upper mount and the lower mount, the guide rail having a generally upright lower portion, an arcuate intermediate portion, and an inclined upper portion.

5. The blind of claim 1, wherein the brace further comprises:
   an upper member; and
   a lower member adjustable connected to the upper member for adjustment of the length of the brace.

6. The blind of claim 1, further comprising, a mounting assembly attached to the guide assembly for removable attachment to a watercraft.

7. The blind of claim 1, wherein the blind is collapsible.

8. A collapsible blind for hunting and observation of wildlife, comprising:
   a guide assembly having an upper mount, a lower mount, and guide rails extending between the upper mount and the lower mount, the guide rails being detachable from the upper mount for pivotal movement of the guide rails to a collapsed position;
   a door assembly moveably engaged with the guide assembly for movement between a concealed position and an open position; and
   a brace moveably attached to the guide assembly for movement between a support position for support of the door assembly in the concealed position and a release position for release of the door assembly into the open position.

9. The blind of claim 8, wherein the blind is configured for installation in a pit.

10. The blind of claim 8, the door assembly further comprising:
    a cover defining an opening shaped and sized for viewing of wildlife by an operator with reduced detection by the wildlife; and
    a guide member moveably attached between the cover and the guide assembly.

11. The blind of claim 8, wherein the brace further comprises:
    an upper member; and
    a lower member adjustable connected to the upper member for adjustment of the length of the brace.

12. The blind of claim 8, further comprising, a mounting assembly attached to the guide assembly for removable attachment to a watercraft.

13. A blind for hunting and observation of wildlife, comprising:
    a guide assembly having an upper mount, a lower mount, and rails extending between the upper mount and the lower mount, the rails being detachable from the upper mount for pivotal movement of the rails to a collapsed position;
    a cover defining an opening shaped and sized for viewing of wildlife by an operator with reduced detection by the wildlife;
    a guide member moveably attached between the cover and the guide assembly; and
    a brace moveably attached to the guide assembly for movement between a support position for support of the door assembly in the concealed position and a release position for release of the door assembly into the open position.

14. The blind of claim 13, wherein the blind is configured for installation in a pit.

15. The blind of claim 13, the door assembly further comprising:
    a cover defining an opening shaped and sized for viewing of wildlife by an operator with reduced detection by the wildlife; and
    a guide member moveably attached between the cover and the guide assembly.

16. The blind of claim 13, wherein the brace further comprises:
    an upper member; and
    a lower member adjustable connected to the upper member for adjustment of the length of the brace.

17. The blind of claim 13, further comprising, a mounting assembly attached to the guide assembly for removable attachment to a watercraft.

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