

W.D.D.O. Standard Operating Procedures for Conducting Randomized Double Blind Certification Testing for Bedbug Detection Canine Teams

1. General

- A. Persons wishing to challenge the W.D.D.O. Bedbug Detection Canine Team Certification Test must first be members of the organization in good standing, having paid all applicable membership dues, and completed all appropriate applications. Certificates, as well as other member benefits, will not be awarded to persons that have not met all requirements for membership.
- B. Certificates are awarded to members in good standing that successfully challenge all phases of the test. Teams awarded certification under this test will have demonstrated their ability to locate evidence of a bed bug infestation in conditions similar to those encountered in the field.
- C. Certificates awarded under this test are valid for one (1) year from the date of testing. If at any time within one calendar year from the date of testing, the tested team challenges the test again, and does not earn a passing score, the prior certificate issued will be null and void.
- D. Tests are conducted based on “Double Blind” testing methods. Double blind refers to the fact that neither the tested team nor anyone else present during testing is aware of how many hides are placed or the location of hides in search areas or if hides are placed in a given area or room. The number of hides, and/or location(s) of hides are based on randomized choices, typically by rolling a twelve sided die, or through use of a random number generator. The appropriate choices based on the die or random number generator roll are outlined below in Section Two, Test Setup Procedures. All phases of the test shall include at a minimum one blank search area or item, as well as one search area or item containing an appropriate hide.
- E. Prior to testing, each handler will be given a copy of the W.D.D.O. Double Blind Canine Scent Detection Certification Test Overview Sheet. This sheet is a brief overview of how each test is structured, and administered, and includes all applicable rules by which the tested team must adhere. All handlers are required to read and sign, acknowledging their understanding and agreement to comply with the rules of the test. After reading and signing, the W.D.D.O. Double Blind Canine Scent Detection Certification Test Overview Sheet must be turned in to the Testing and/or Certifying Official.
- F. Tests are to be structured and planned by a properly qualified and appointed individual under W.D.D.O. guidelines and procedures as possessing the knowledge and experience to properly structure such a test. This person is referred to hereafter as the “Testing Official.” The Testing Official is responsible for structuring each test, as well as ensuring that all applicable rules and guidelines outlined below are adhered to. When the Camera System is used in lieu of a proctor to observe the tested team(s) during the testing, the Testing Official is also responsible for monitoring the team’s progress for the duration of the test.
- G. Tests are to be administered by a properly qualified and appointed individual under W.D.D.O. guidelines and procedures as possessing the knowledge and experience to properly administer such a test. This person is referred to hereafter as the “Certifying Official.” The Certifying official is responsible for setting up the test at the direction of the Testing Official, and maintaining the integrity of the test. When the Camera System is used in lieu of a proctor to observe the tested team(s) during the testing, the Certifying Official is also responsible for monitoring the team’s progress for the duration of the test.

- H. **Camera System** – A camera system may be used to remotely observe the handler during all testing scenarios in place of a Proctor. The Testing and Certifying Officials will monitor the team’s progress as the team challenges the test to ensure that all rules outlined in Section Three of this document and in the W.D.D.O. Double Blind Canine Scent Detection Certification Test Overview Sheet are followed.
- I. Where required by state law or in such situations where deemed necessary by the Testing Official and/or Certifying Official a Proctor is to accompany tested handlers during the test and record all areas chosen by the tested handler as containing hides on the Handler Answer Sheet. If for any reason, the camera system is unavailable for use in monitoring the tested team’s progress during the testing scenario, a proctor must be assigned to accompany the tested handler.
 - i. The Proctor must be a third, disinterested party with no financial or other interest in the outcome of the test.
 - ii. The proctor must have no prior knowledge of where, or if any hides are placed in a given area.
 - iii. Upon completion of the testing, the Proctor will attest through his or her signature on the Handler Answer Sheet, to the test’s accuracy and propriety.

2. Test Setup Procedure

A. Hides

- i. Hides used in this test are to contain a varying number of live adult insects to present varied amounts of odor in search scenarios. Hides may also include viable eggs and instars at various stages. If a substrate is included in the hide, it should be a neutral material such as blank cardboard.
- ii. No containers or insects or substrate or any other items or materials are to be used in these tests that have ever been treated with or exposed to any pesticides of any type or form whatsoever, whether natural, chemical or any other method besides heat treatment.
- iii. No pseudo scents or scented toys are allowed for use in testing scenarios.
- iv. Hides are to be placed in scenarios and allowed to remain there for a minimum of thirty minutes prior to beginning testing.

B. Basic Odor Recognition Phase

1) Scent Boards

- i. Scent boards are to be prepared as follows: on an eight to ten foot long 2 X 4, eight to ten pieces of two inch diameter PVC pipe, approximately three inches in length, are evenly spaced and mounted vertically. Each pipe should have a properly fitting cap with multiple holes drilled through. These holes are to be approximately one eighth of an inch or more in diameter and clustered near the center of the cap.
- ii. The Scent Board should resemble the following diagram:



- iii. At the discretion of the Testing Official, a suitable replacement, such as empty, unused, clean paint cans, or similar containers deemed suitable by the Testing Official, may be substituted for the scent boards described above.

- 2) **Determining the Number of Hides** – The choice as to how many of the pipes will contain hides is based on rolling a twelve sided die, or using a random number generator. The results of this roll is to be recorded on the Test Setup Form
 - i. If a one, two, three, four, five, or six is rolled, one pipe is to contain a hide. The remaining pipes are blank.
 - ii. If a seven, eight, nine, ten, eleven, or twelve is rolled, two pipes are to contain a hide. The remaining pipes are blank.
- 3) **Placement of Hides** – The hides are to be placed on the board with at least two blank pipes between pipes containing hides, according to the following procedure. The results of each roll are to be recorded on the Test Setup Form.
 - i. Each pipe is to be assigned and clearly marked with a number beginning with one.
 - ii. A twelve sided die or a random number generator is used to determine in which pipes hides should be replaced.
 - iii. Depending on the number of pipes included, rolls with a value of nine, ten, eleven, or twelve will be discarded and rerolled if there is no matching pipe or container of that number.
 - iv. The first roll will determine the number of the pipe in which the first hide will be placed.
 - v. Each subsequent hide, if called for by the initial roll to determine the number of hides, is to be determined by another roll.
 - vi. Subsequent rolls that would call for placing a hide in a pipe already containing a hide, or in a pipe with less than two blank pipes between hides, will be discarded and call for another roll.
 - vii. This process is to be repeated until all hides have been placed in accordance with the procedures outlined here.

C. Room Search Phase

- 1) The Room Search Phase is to consist of four rooms, or distinct areas. Each room or area will be assigned a unique number of one through four.
- 2) No one room will contain more than one hide.
- 3) A minimum of one of the rooms will be “blank,” in that no hides will be placed in that room.
- 4) A minimum of one room will contain a hide placed in accordance with the procedures outlined below.
- 5) **Number of Hides to be Placed** – To determine the number of rooms containing a hide, a twelve sided die, or a random number generator is used. The result of this roll is to be recorded on the Test Setup Form.
 - i. If a one, two, three, or four is rolled, one hide is to be placed in one of the rooms, and the other three rooms are to be blank.
 - ii. If a five, six, seven, or eight is rolled, two hides are to be placed in two of the rooms, and the other two rooms are to be blank.
 - iii. If a nine, ten, eleven, or twelve is rolled, three hides are to be placed in three of the rooms, and the fourth room is to be blank.
- 6) **Identifying Rooms in Which Hides are to be Placed** – To determine which of the rooms will contain hides a twelve sided die, or random number generator is used. The results of each roll are recorded on the Test Setup Form.

- i. A roll of one, two, or three indicates that the hide is to be placed in the room, or area numbered as one.
 - ii. A roll of four, five, or six indicates that the hide is to be placed in the room, or area numbered as two.
 - iii. A roll of seven, eight, or nine indicates that the hide is to be placed in the room, or area numbered as three.
 - iv. A roll of ten, eleven, or twelve indicates that the hide is to be placed in the room, or area numbered as four.
 - v. The first hide is to be placed based on the roll as indicated here in this section. Each subsequent hide will be determined according to the same process, taking into account that duplicate rolls, and rolls that would cause a second hide to be hidden in the same room or area will be discarded, and call for an additional roll until all hides have been placed in accordance with these procedures.
- 7) **Placing the Hides** – The location of hides placed in each room is to be determined by rolling a twelve sided die, or use of a random number generator. This is the recommended best practice for placing hides within the assigned rooms, but in certain situations, such as a lack of adequate hiding places, the Testing Official may place the hides within the assigned rooms using his or her discretion. The location of each hide is to be recorded on the Test Setup Form.
- a. Each room is to be divided into four quadrants, individually numbered one through four.
 - i. A roll of one, two, or three indicates that the hide is to be placed in the quadrant numbered as one.
 - ii. A roll of four, five, or six indicates that the hide is to be placed in the quadrant numbered as two.
 - iii. A roll of seven, eight, or nine indicates that the hide is to be placed in the quadrant numbered as three.
 - iv. A roll of ten, eleven, or twelve indicates that the hide is to be placed in the quadrant numbered as four.
 - b. This process is to be repeated for each room to contain a hide, until all hides have been placed.

3. Testing Procedures

A. Security

- i. After planning the test, and placing the hides in the test area, the Testing and/or Certifying Official is to maintain strict control of the form(s) containing information regarding test answers until after testing is complete.
- ii. Separate areas are to be designated for handlers who are preparing to test, and handlers who have completed testing. Until testing is completed the two groups should remain separate.
- iii. Upon a handler's completion of a test, his or her Handler Answer Sheet should be immediately turned in to the Testing or Certifying Official.
- iv. During the test, handlers are not allowed to move, open, or disturb any items, or otherwise in any manner alter an area in an attempt to visually confirm or reveal the presence or absence of a hide. Doing so will result in disqualification.

- v. During the test, the handler is not allowed to receive any form of help, advice, or instruction by any means from anyone. If the Testing/Certifying Official (or Proctor where applicable) becomes aware of any such outside influence, the team will be disqualified.

B. Basic Odor Recognition Phase

- i. Tested teams will first have to successfully challenge the Basic Odor Recognition Test.
- ii. Tested teams will have a total of not more than ten (10) minutes to complete the Basic Odor Recognition Phase.
- iii. Handlers will enter the testing area alone, or with a Proctor when applicable. The Testing and Certifying Official will observe the test through the use of the camera system monitoring the testing area. If the camera system is unavailable for use in monitoring the test for any reason, a proctor must be used.
- iv. The tested handler, or proctor where applicable, will record the handler's choices on the Handler Answer Sheet.
- v. Upon completion of the test scenario, the handler will review the Handler Answer Sheet to ensure that it accurately records their choices.
- vi. The handler, and the Proctor where applicable, will sign the Handler Answer Sheet and immediately turn it in the Testing and/or Certifying Official.

C. Room Search Phase

- i. After successful completion of the Basic Odor Recognition Phase, the tested handler will move on to the Room Search Phase.
- ii. Tested teams will have a total of not more than twenty (20) minutes to complete the Room Search Phase.
- iii. Handlers will enter the testing area alone, or with a proctor where applicable. The Testing and Certifying Official will observe the test through the use of the camera system monitoring the testing area. If the camera system is unavailable for use in monitoring the test for any reason, a proctor must be used.
- iv. The tested handler, or proctor where applicable will record the handler's choices on the Handler Answer Sheet.
- v. Upon completion of the test scenario, the handler will review the Handler Answer Sheet to ensure that it accurately records their choices.
- vi. The handler and the Proctor where applicable, will sign the Handler Answer Sheet and immediately turn it in to the Testing and/or Certifying Official.

4. Scoring

- A. **Recording Results** – Alerts for each phase of the test are to be recorded on the Handler Answer Sheet by the handler or the accompanying Proctor where applicable. The Handler Answer Sheet is reviewed by the tested handler to ensure that it accurately represents the handler's choices of alerts. The form is then signed by the handler and by the Proctor where applicable and submitted to the Testing and/or Certifying Official for review.
 - i. No person other than the tested handler is allowed to interpret the canine's behavior. It is the sole responsibility of the tested handler to interpret the actions of the canine, and identify areas where the canine has indicated the presence of the target odor.
 - ii. It is the sole responsibility of the tested handler to clearly and accurately communicate and record (or where applicable, have the Proctor record) the specific area(s) identified by the canine as the areas containing the target odor.

- iii. Failure to successfully pass any phase of the test will be considered as a fail for the entire test.
 - B. **Basic Odor Recognition Phase** – In order to be awarded certification as a W.D.D.O. Bedbug Detection Canine Team, the team must complete the Basic Odor Recognition Phase of the test with no false alerts (false positives) and no misses (false negatives).
 - C. **Room Search Phase** – During the Room Search Phase of the test, the team is allowed one false alert (false Positive). The team must find and properly identify the location of all target odors and is not allowed to miss any hide (false negative). All alerts indicated by the handler must be within three (3) feet of the specific location of the hide or the alert is considered false.
 - D. Upon completion of the testing, the Testing and Certifying Officials will review the choices of the tested handler recorded on the submitted Handler Answer Sheet(s). Based upon this review a pass or fail determination is made by the Testing and Certifying Official who attests through his or her signature(s) to the test’s accuracy and propriety.
5. **Retesting**
- A. Teams that are unsuccessful on the first attempt at the test are allowed to retest once within twenty-four (24) hours of the first attempt.
 - B. If the team fails to successfully challenge the test on the second attempt, the team must then wait thirty (30) days, and are recommended to obtain additional training before being eligible to challenge the test again.
6. **Testing Records** – Test related documents will be maintained for thirty (30) days in the event of an appeal. After thirty (30) days, all test related documents will be destroyed. The only record maintained after thirty (30) days will be a record of teams who earned a passing grade.
7. **Appeals Process** – If a tested handler wishes to appeal the results of a test, a written request must be submitted to the Certification Committee within ten (10) calendar days of the test. The request for appeal may be sent via email to secretary@wddo.org, or by mail to W.D.D.O Certification Committee 262 Kennel Dr. Vincent, AL 35178.
- A. Each request must contain the name of the handler and the canine along with the company and contact information for the handler and the microchip number for the canine (if applicable), as well as the names of the Testing and Certifying Officials.
 - B. Each request must also contain the type of test, the date, time, and location of the test, and the specific reasons for an appeal.
 - C. The Certification Committee will investigate and determine if the test(s) were structured or administered improperly, and notify the handler of its findings in writing.
 - D. If the Certification Committee finds that a test was structured or administered improperly, the thirty (30) day waiting period before being eligible to retest will be waived, and the handler will be allowed to retest immediately.
 - E. Any additional costs, or travel expenses incurred for either the Testing/Certifying Official or the handler in the event of an appeal will be the responsibility of the parties involved. W.D.D.O. will not be liable for any additional expenses, or lost income.