



COMBScore™ SHEET

For Analysis of ImmunoComb® Results

Recording Results:

The color intensity on each spot is proportional to the antibody level in the samples tested. The results are read by comparing the colors of the test sample (e.g., S1 = One ImmunoComb® unit, S2 = Two ImmunoComb® units, etc.). If the color intensity of a spot falls between two CombScale color circles, assign to the lower S value. Colorless results are scored zero. Summarize the test results on the CombScore™ sheet. Use separate score module for each agent. Record the reading of each test result by shading in the appropriate box on the graph of the CombScore™ sheet. This tabulation procedures a histogram (bar graph) representing the antibody titer profile of the flock.

Analysis:

To calculate the CombScore™ of the flock, perform the following three computations:

1. Multiply the number of samples in a column by the corresponding S value. Write the answers for each column (S1, S2, etc.) in the open box under the column. Thus, if ten boxes were shaded in (ten samples) at S5 you would write "50" in the open box below S5.
2. Add the numbers (from the previous computation) in all the boxes and write the sum in the total box.
3. Divide the total (from the previous computation) by the sample size (number of birds tested) to arrive at the score. The score is actually the mean antibody titer of the test sampling.

Interpretation of Results:

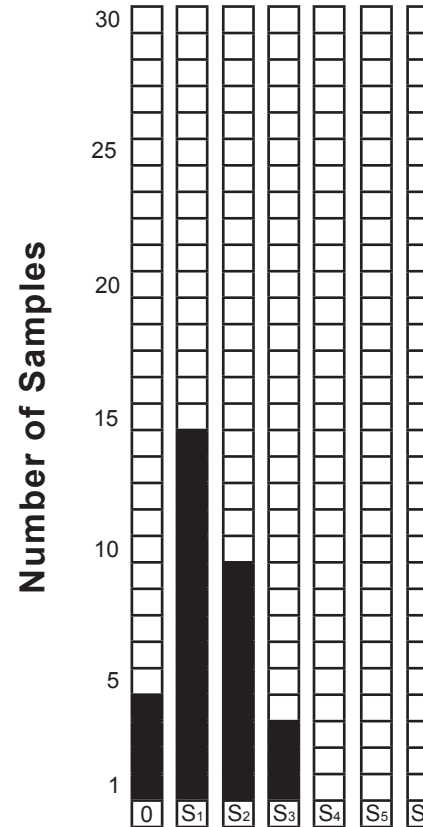
A negative reading on the ImmunoComb® (e.g., 0) for IBD, ND or IB indicates that the bird has a few or no antibodies to that disease. Positive ImmunoComb® unit readings of S1 and higher correspond to increasing antibody levels. Depending upon the specific flock history, positive results may indicate passively transferred (maternal) antibody, vaccination or natural exposure to the disease. Routine monitoring is necessary to evaluate the immune status of a flock over time.

If you are a CombScan software user, these CombScore™ tables can be obtained easily using your CombScan2007 software. After reading the results, simply click on "CombScore" and choose the appropriate number of Combs for your computation and click "OK".

Example

Time of Vaccination

Agent *Newcastle*

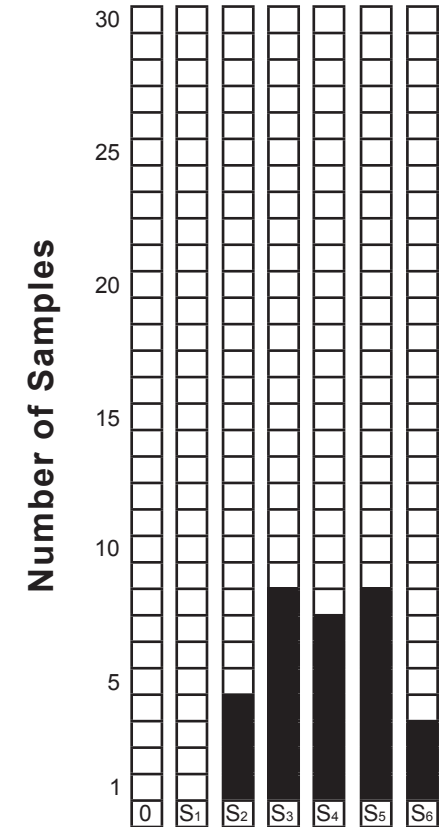


| | | | | | | | | | |
|-------------|------|---|---|----|----|---|--|--|--|
| Total | 41 | = | 0 | 14 | 18 | 9 | | | |
| Sample Size | 30 | | | | | | | | |
| Score | 1.37 | | | | | | | | |

Example

2 Weeks post-Vaccination

Agent *Newcastle*



| | | | | | | | | | |
|-------------|------|---|--|--|---|----|----|----|----|
| Total | 118 | = | | | 8 | 24 | 28 | 40 | 18 |
| Sample Size | 30 | | | | | | | | |
| Score | 3.93 | | | | | | | | |

These two CombScore™ tables (example) illustrate flock antibody titer profiles for Newcastle Disease. A rise in mean antibody level is seen between the time of vaccination (1.37) and 2 weeks post-vaccination (3.93).

Date Company

Flock Source

Flock Type

Flock House

Age week(s) Day(s)

Female/male Number of samples

Kit Serial #

No. of Combs Total Tests

Operator

Remarks

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Vaccination History

Marek's

Newcastle

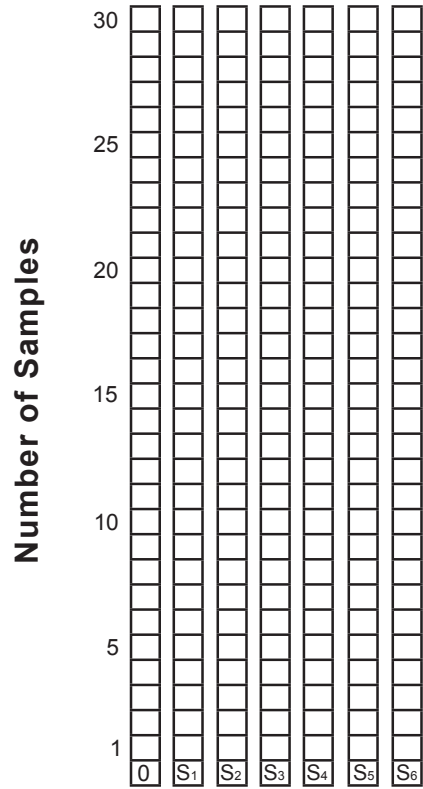
Bronchitis

Bursal

Reo.....

Other

Agent

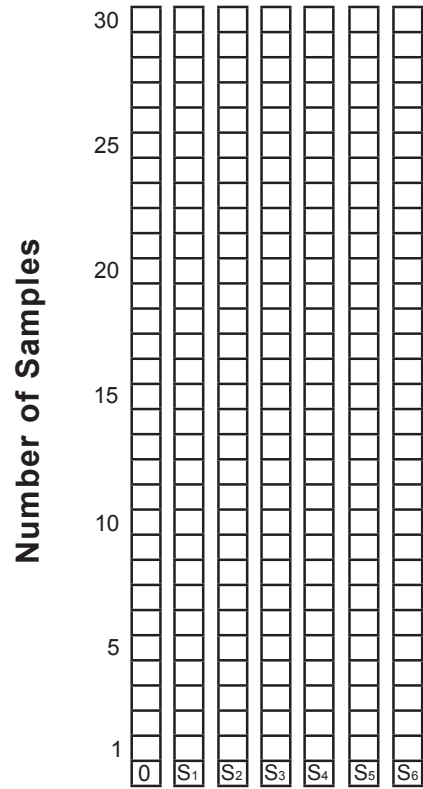


Total = - - - - - -

Sample Size

Score

Agent

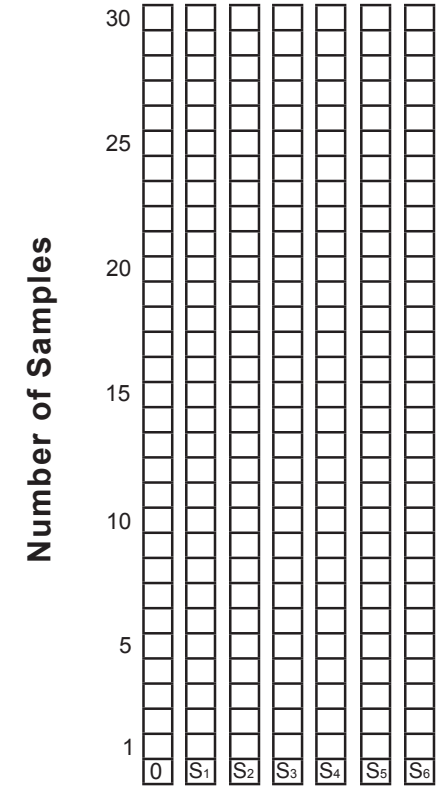


Total = - - - - - -

Sample Size

Score

Agent



Total = - - - - - -

Sample Size

Score