

**WILDLIFE HABITAT EVALUATION GUIDE
WATER ASSOCIATED BIRDS**

Date of Survey _____ Time Start _____ Time End _____
Observer/ Recorder _____ Weather _____
Name of landowner _____ Location _____
Current land-use practice/irrigation method _____
Project-related changes _____

GROUP MODEL

Representative Species: Mallard, Canada goose, white-faced ibis, California gull, Great blue heron.

Habitat: Lakes, ponds, streams, grasslands, pastures, croplands, and marshes.

Special Habitat Requirements: All require water for feeding and/or resting. The great blue heron prefers tall trees for nesting.

Food Habits: Mallards and Canada geese feed primarily on cultivated grains, grasses, clovers, aquatic vegetation and invertebrates. The ibis probes moist to wet ground for earthworms and burrowing insects. Gulls are omnivorous feeding on garbage, insects, rodents, carrion, vegetation, and fish. The great blue heron feeds on fish, crustaceans, insects, aquatic plants, and rodents.

HABITAT INVENTORY

RATING

a. Cropland Quantity and Quality

a.

Percent of area in cropland:

76 - 100%	=1.0
51 - 75%	=0.5
26 - 50%	=0.3
0 - 25%	=0.1

Deduct 0.3 points for any heavy (e.g., moldboard plow) grazing, or other destruction of crop residue, tillage, burning,

Deduct 0.3 points for heavy use of insecticides/pesticides.

Add 0.1 - 0.5 if suitable wetland habitat occurs near study area.

Rationale: Certain types of crops and crop residue provide valuable forage for this group. The value of the area is enhanced if suitable wetland habitat is

available nearby. Clean-farming practices and extensive use of insecticides/pesticides are detrimental to these species.

b. Herbaceous Vegetation Quantity and Quality

b. _____

Percent of area with uncultivated herbaceous vegetation:

31-60%	=1.0
11-30% or 61- 80%	=0.5
0-10% or 81- 100%	=0.1

Deduct 0.3 points for heavy grazing, burning, pesticide application, etc.

Add 0.1 -0.5 points if suitable wetland habitat is available nearby.

Rationale: The representative species often forage in pastures and other lands with herbaceous cover. Dense herbaceous cover also provides nesting habitat for many species in this group. Nearby wetland habitat increases the value of the habitat. However, as the herbaceous cover nears 100% these other important habitat elements are eliminated. Haying, burning, and heavy grazing are detrimental to these species. Pesticide applications reduce prey populations.

c. Woody Vegetation Quantity and Quality

c. _____

Percent of area with woody vegetation (shrubs and trees):

11-30%	=1.0
31- 50%	=0.5
0-10% or 51 -100%	=0.3

Deduct 0.3 points for heavy grazing, burning, herbicide application, etc.

Add 0.1 -0.5 points if suitable wetland habitat occurs nearby.

Add 0.3 points if trees are suitable for use as rookeries by herons.

Rationale: Most members of this group within the project area do not require woody vegetation, although herons do require tall trees/snags for nesting. Moderate amounts of woody vegetation are acceptable as it improves structural diversity within the study area. Excessive woody cover diminishes the amount of open habitat favored by this group.

d. Interspersion of Vegetation Types

d. _____

Avg. distance between vegetation types 200-500 feet = 1.0

Avg. distance between vegetation types over 500 feet = 0.5

Avg. distance between vegetation types <200 feet = 0.3

Rationale: Most members of this group are highly mobile and often travel lengthy distances between feeding and roosting sites. Also, many species display flocking tendencies and the population size for many may be negatively correlated with habitat patch size and increased interspersion. However, long distances between feeding and roosting areas could result in excessive energy expenditure.

e. Human Disturbance

e. _____

Infrequently used roads; no occupied dwellings in study area; urban development at least 1/2 mile away; no harassment program or hunting in effect = 1.0

Occasionally used roads; 1 occupied dwelling per 40 acres; urban development within 1/4 to 1/2 mile; minimal harassment or hunting in effect = 0.5

Study area <40 acres; contains 2 or more occupied dwellings or frequently used roads; within 1/4 mile of urban development; considerable harassment or hunting pressure in effect = 0.3

Rationale: Human activity/harassment/hunting can deter members of this group from otherwise suitable habitat.

f. Lakes, Ponds, Wetlands, Streams

f. _____

Avg. distance from any point in study area to perennial lake, pond, stream or other wetland is <1/2 mile = 1.0

Avg. distance from any point in study area to perennial stream or wetland is 1/2 mile or average distance from any point in study area to seasonal stream or wetland is < 1/2 mile = 0.5

Avg. distance from any point in study area to perennial wetland is 1-5 miles or average distance from any point in study area to intermittent lake, pond, stream, or wetland is 1/2 - 1 mile = 0.3

Avg. distance from any point in study area to a perennial wetland is greater than 5 miles or average distance from any point in study area to intermittent wetland is 1-5 miles = 0.1

Deduct 0.2-0.5 points for any grazing, cultivation, burning, vegetation removal or pesticide use within 1/2 mile of lake, pond, wetland or stream.

Add 0.3 - 0.5 if wetlands present include nesting island, aquatic vegetation.

Rationale: Habitat for this group is significantly enhanced by the presence of nearby wetlands.

HABITAT VALUE

$$\text{Habitat value} = \frac{\text{Total Rating}}{\text{No. of inventory factors rated}} = \underline{\hspace{2cm}}$$

LIMITING FACTORS

ENHANCEMENT OPPORTUNITES