



## California Department of Fish and Wildlife Biogeographic Information and Observation System (BIOS 6) Conditional Statements:

A conditional statement is comprised of three components: *fields*, *operators*, and *values*. The statement must follow a syntax (format) to be valid. More complex statements can be created by using connectors.

### Table of Operators

Operator	Description [Symbol]
<b>Equals</b>	Returns record(s) which equal a value [=]
<b>Not Equal</b>	Returns record(s) which do not equal a value [ <> ]
<b>Less than</b>	Returns record(s) which are less than a value [ < ]
<b>Less or Equal</b>	Returns record(s) which are less than or equal to a value [ <= ]
<b>Greater than</b>	Returns record(s) which are greater than a value [ > ]
<b>Greater or Equal</b>	Returns record(s) which are greater than or equal to a value [ >= ]
<b>LIKE</b>	Used to find a record(s) with a portion of text, with a wildcard '%' [ LIKE '%%' ]
<b>IN (List... )</b>	Returns record(s) that match a list of values [ IN ( ) ]
<b>Is Null</b>	Returns record(s) with a null value [ IS NULL ]
<b>Is Not Null</b>	Returns all record(s) except those with a null value [ IS NOT NULL ]
<b>Is Not Blank</b>	Return(s) all records which are not blank and not null [ <> " ]

### Table of Connectors

Connector	Description
<b>AND</b>	Returns records where <i>both</i> statements are true
<b>OR</b>	Returns records where <i>either</i> statement is true

### Example Data

ComName	Location	Number	Elevation_ft
Snowy egret	Carnegie SVRA		1850
Western toad	Carnegie SVRA	4	1725
Mule deer	Carnegie SVRA	3	2150
Gophersnake	Carnegie SVRA	1	1975
Mule deer	Stanislaus NF	6	4250
Barn owl	Stanislaus NF	11	1750

## Example Queries and Results

**Query [Equals]:** ComName = 'Western toad'

**Results:**

ComName	Location	Number	Elevation_ft
Western toad	Carnegie SVRA	4	1725

**Query [Not Equal]:** Location <> 'Carnegie SVRA'

**Results:**

ComName	Location	Number	Elevation_ft
Mule deer	Stanislaus NF	6	4250
Barn owl	Stanislaus NF	11	1750

**Query [Less Than]:** Elevation\_ft < 1750

**Results:**

ComName	Location	Number	Elevation_ft
Western toad	Carnegie SVRA	4	1725

**Query [Less or Equal]:** Elevation\_ft <= 1750

**Results:**

ComName	Location	Number	Elevation_ft
Western toad	Carnegie SVRA	4	1725
Barn owl	Stanislaus NF	11	1750

**Query [Greater Than]:** Number > 6

**Results:**

ComName	Location	Number	Elevation_ft
Barn owl	Stanislaus NF	11	1750

**Query [Greater or Equal]:** Number >= 6

**Results:**

ComName	Location	Number	Elevation_ft
Mule deer	Stanislaus NF	6	4250
Barn owl	Stanislaus NF	11	1750

**Query [LIKE]:** Location LIKE '%SVRA'

**Results:**

ComName	Location	Number	Elevation_ft
<b>Snowy egret</b>	Carnegie SVRA		1850
<b>Western toad</b>	Carnegie SVRA	4	1725
<b>Mule deer</b>	Carnegie SVRA	3	2150
<b>Gophersnake</b>	Carnegie SVRA	1	1975

**Query [In (List...)]:** ComName IN ('Mule deer', 'Gophersnake')

**Results:**

ComName	Location	Number	Elevation_ft
<b>Mule deer</b>	Carnegie SVRA	3	2150
<b>Gophersnake</b>	Carnegie SVRA	1	1975
<b>Mule deer</b>	Stanislaus NF	6	4250

**Query [Is Null]:** Number IS NULL

**Results:**

ComName	Location	Number	Elevation_ft
<b>Snowy egret</b>	Carnegie SVRA		1850

**Query [Is Not Null]:** Number IS NOT NULL

**Results:**

ComName	Location	Number	Elevation_ft
<b>Western toad</b>	Carnegie SVRA	4	1725
<b>Mule deer</b>	Carnegie SVRA	3	2150
<b>Gophersnake</b>	Carnegie SVRA	1	1975
<b>Mule deer</b>	Stanislaus NF	6	4250
<b>Barn owl</b>	Stanislaus NF	11	1750

**Query [Is Not Blank]:** Location <> ''

**Results:** (all results returned)

ComName	Location	Number	Elevation_ft
<b>Snowy egret</b>	Carnegie SVRA		1850
<b>Western toad</b>	Carnegie SVRA	4	1725
<b>Mule deer</b>	Carnegie SVRA	3	2150
<b>Gophersnake</b>	Carnegie SVRA	1	1975
<b>Mule deer</b>	Stanislaus NF	6	4250
<b>Barn owl</b>	Stanislaus NF	11	1750

**Query [AND]:** Location LIKE '%SVRA' AND Elevation\_ft > 1850

**Results:**

<b>ComName</b>	<b>Location</b>	<b>Number</b>	<b>Elevation_ft</b>
<b>Mule deer</b>	Carnegie SVRA	3	2150
<b>Gophersnake</b>	Carnegie SVRA	1	1975

**Query [OR]:** Location LIKE '%SVRA' OR Elevation\_ft > 1800

**Results:**

<b>ComName</b>	<b>Location</b>	<b>Number</b>	<b>Elevation_ft</b>
<b>Snowy egret</b>	Carnegie SVRA		1850
<b>Western toad</b>	Carnegie SVRA	4	1725
<b>Mule deer</b>	Carnegie SVRA	3	2150
<b>Gophersnake</b>	Carnegie SVRA	1	1975
<b>Mule deer</b>	Stanislaus NF	6	4250

Thank you for using BIOS. Please [email](#) us with any comments or questions.