

## Otter Quota Change 2021

### Otter Population Status

Otter populations are typically increasing when the proportion of juveniles and yearlings in the harvest is >40% (Tabor 1974, Lauhachinda 1978, Mombray et al. 1979, Anderson and Scanlon 1981, Melquist and Hornocker 1983, Polechla 1987, Diggs 2013). When juveniles and yearlings represent 20-40% of harvest populations are generally stable, and decreases are occurring when <20% of harvest is juveniles and yearlings.

The long-term (2000-2014) average JV/YR proportion of harvest in Montana's Region 1 is 44%. During the last five years (2015-2019) the average has exceeded the long-term average and is 55% (Table 1).

The long-term (2000-2014) average JV/YR proportion of harvest in Montana's Region 2 is 47%. During the last five years (2015-2019) the average has exceeded the long-term average and is 65% (Table 2).

**Table 1.** FWP Region 1 otter harvest data by age-class and license year.

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| <b>License Year</b>  | <b>% Adult (2+ yrs)</b> | <b>% Juv (0.5 yrs)</b> | <b>% Yrlg (1.5 yrs)</b> | <b>% Juv/Yrlg</b> |
|----------------------|-------------------------|------------------------|-------------------------|-------------------|
| 2000                 | 53                      | 29                     | 19                      | 48                |
| 2001                 | 35                      | 26                     | 32                      | 58                |
| 2002                 | 48                      | 24                     | 20                      | 44                |
| 2003                 | 48                      | 33                     | 10                      | 43                |
| 2004                 | 60                      | 7                      | 26                      | 33                |
| 2005                 | 50                      | 15                     | 19                      | 34                |
| 2006                 | .                       | .                      | .                       | .                 |
| 2007                 | .                       | .                      | .                       | .                 |
| 2008                 | 48                      | 29                     | 10                      | 39                |
| 2009                 | 43                      | 24                     | 24                      | 48                |
| 2010                 | 55                      | 25                     | 10                      | 35                |
| 2011                 | 45                      | 23                     | 14                      | 37                |
| 2012                 | 27                      | 28                     | 24                      | 52                |
| 2013                 | 28                      | 44                     | 12                      | 56                |
| 2014                 | 36                      | 20                     | 28                      | 48                |
| 2015                 | 22                      | 28                     | 16                      | 44                |
| 2016                 | 28                      | 24                     | 38                      | 62                |
| 2017                 | 44                      | 33                     | 22                      | 55                |
| 2018                 | .                       | .                      | .                       | .                 |
| 2019                 | 34                      | 19                     | 38                      | 57                |
| <b>LTA 2000-2014</b> | 44.3                    | 25.2                   | 19.1                    | 44.2              |
| <b>Avg 2015-2019</b> | 32.0                    | 26.0                   | 28.5                    | 54.5              |

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Table 2. FWP Region 2 otter harvest data by age-class and license year.

| <b>License Year</b>  | <b>% Adult (2+ yrs)</b> | <b>% Juv (0.5 yrs)</b> | <b>% Yrlg (1.5 yrs)</b> | <b>% Juv/Yrlg</b> |
|----------------------|-------------------------|------------------------|-------------------------|-------------------|
| 2000                 | 59                      | 35                     | 6                       | 41                |
| 2001                 | 42                      | 38                     | 15                      | 53                |
| 2002                 | 32                      | 41                     | 23                      | 64                |
| 2003                 | 43                      | 17                     | 35                      | 52                |
| 2004                 | 48                      | 14                     | 33                      | 47                |
| 2005                 | 37                      | 29                     | 8                       | 37                |
| 2006                 |                         |                        |                         |                   |
| 2007                 |                         |                        |                         |                   |
| 2008                 | 41                      | 18                     | 12                      | 30                |
| 2009                 | 23                      | 35                     | 15                      | 50                |
| 2010                 | 36                      | 43                     | 21                      | 64                |
| 2011                 | 43                      | 8                      | 31                      | 39                |
| 2012                 | 45                      | 28                     | 11                      | 39                |
| 2013                 | 48                      | 35                     | 0                       | 35                |
| 2014                 | 27                      | 42                     | 23                      | 65                |
| 2015                 | 22                      | 26                     | 37                      | 63                |
| 2016                 | 43                      | 22                     | 35                      | 57                |
| 2017                 | 24                      | 44                     | 32                      | 76                |
| 2018                 | 24                      | 24                     | 33                      | 57                |
| 2019                 | 12                      | 20                     | 52                      | 72                |
| <b>LTA 2000-2014</b> | 40.3                    | 29.5                   | 17.9                    | 47.4              |
| <b>Avg 2015-2019</b> | 25.0                    | 27.2                   | 37.8                    | 65.0              |

These data along with the widespread distribution of harvest records from 2015-2019 (Figure 1) along with anecdotal observations of widespread otter presence and abundance indicate that otter harvest levels up to this point in time have been conservative and have allowed expansion of the population. These data also indicate that raising the otter quota as proposed is justified and should maintain a widespread distribution and sustainable abundance of otter in both Regions 1 and 2. A season adjustment to be more conservative would be considered if the proportion of juveniles and yearlings in the harvest fall below 20% at some point in the future.

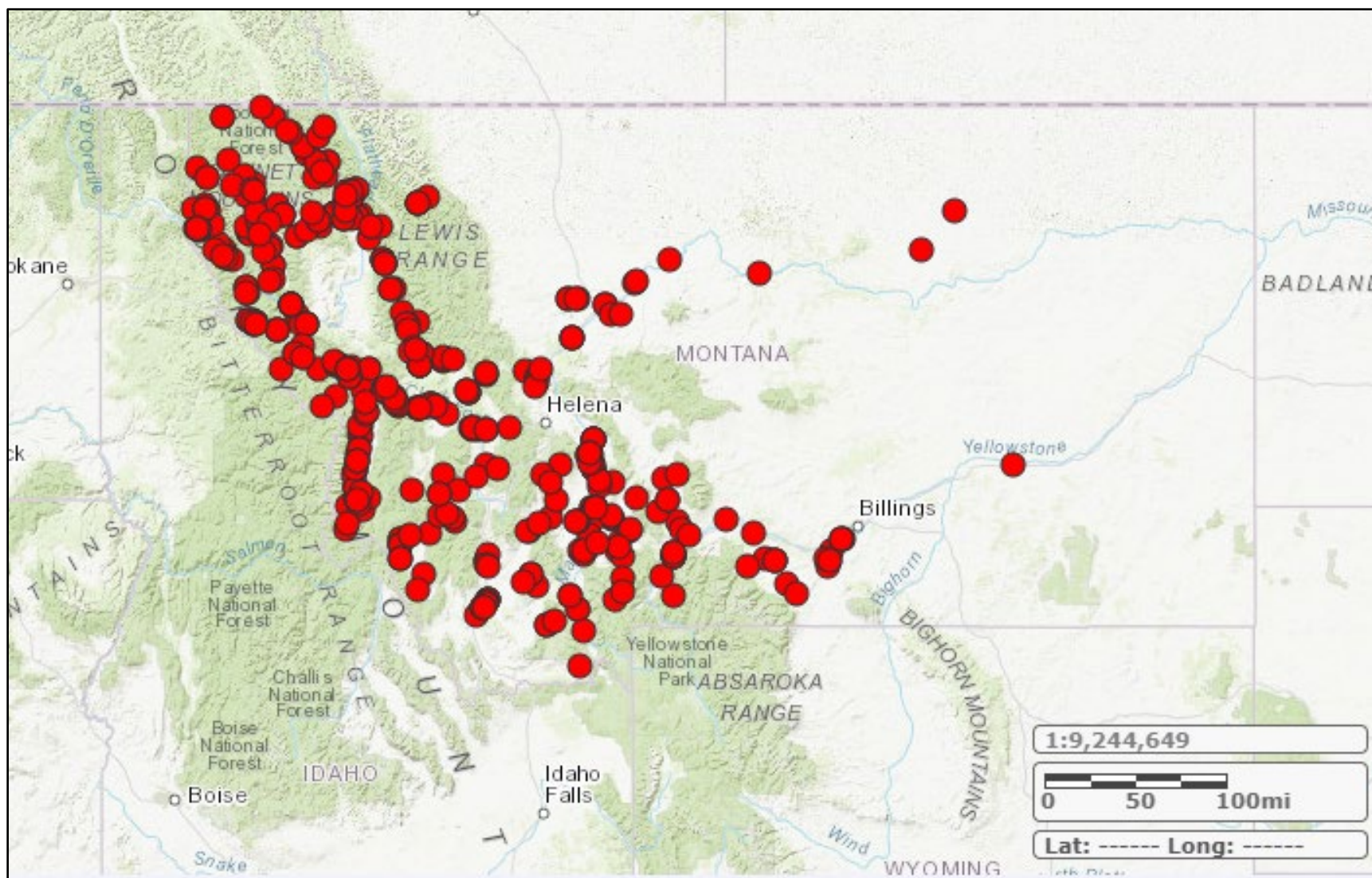


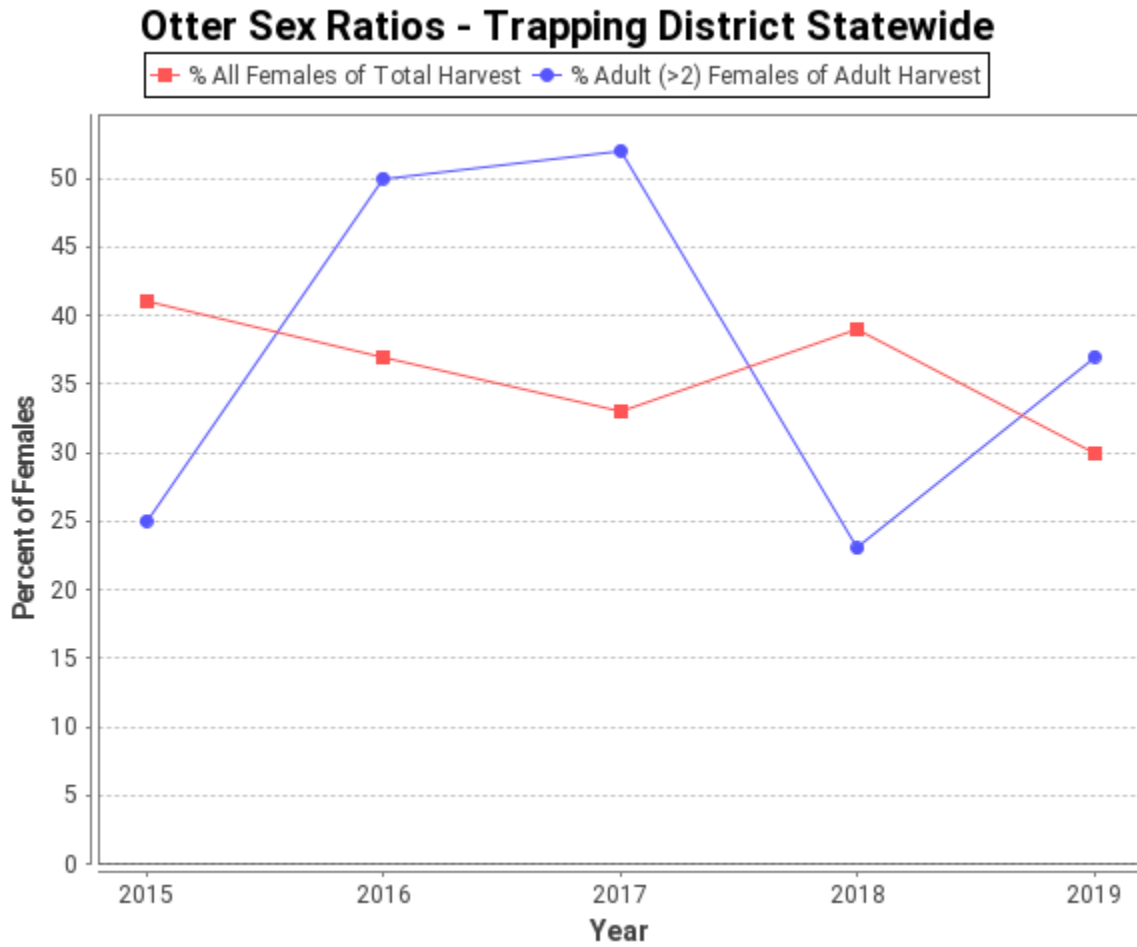
Figure 1. Otter harvest locations during 2015 – 2019 in Montana.

Table 3. Otter harvest by year, FWP Region, and sex, 2015-2020.

| Year/Sex | FWP Region |     |     |    |    |   | Total |
|----------|------------|-----|-----|----|----|---|-------|
|          | 1          | 2   | 3   | 4  | 5  | 7 |       |
| 2015     | 31         | 27  | 28  | 4  |    |   | 90    |
| F        | 11         | 12  | 13  | 1  |    |   | 37    |
| M        | 20         | 14  | 15  | 2  |    |   | 51    |
| U        |            | 1   |     | 1  |    |   | 2     |
| 2016     | 29         | 23  | 25  | 5  | 2  |   | 84    |
| F        | 13         | 6   | 10  | 2  |    |   | 31    |
| M        | 15         | 17  | 15  | 3  | 2  |   | 52    |
| U        | 1          |     |     |    |    |   | 1     |
| 2017     | 28         | 25  | 13  | 2  | 4  |   | 72    |
| F        | 10         | 10  | 2   | 1  | 1  |   | 24    |
| M        | 16         | 15  | 11  | 1  | 3  |   | 46    |
| U        | 2          |     |     |    |    |   | 2     |
| 2018     | 30         | 21  | 16  |    | 3  |   | 70    |
| F        | 13         | 8   | 7   |    |    |   | 28    |
| M        | 16         | 13  | 9   |    | 1  |   | 39    |
| U        | 1          |     |     |    | 2  |   | 3     |
| 2019     | 32         | 25  | 34  | 2  | 5  | 1 | 99    |
| F        | 13         | 5   | 10  | 1  | 1  |   | 30    |
| M        | 19         | 19  | 22  | 1  | 3  | 1 | 65    |
| U        |            | 1   | 2   |    | 1  |   | 4     |
| 2020     | 29         | 24  | 29  | 3  | 3  |   | 88    |
| F        | 11         | 10  | 10  | 2  | 1  |   | 34    |
| M        | 18         | 12  | 19  | 1  | 2  |   | 52    |
| U        |            | 2   |     |    |    |   | 2     |
| Total    | 179        | 145 | 145 | 16 | 17 | 1 | 503   |

Table 4. Number of successful otter trappers in Montana by year, 2015-2020.

| Year | Otter Trappers |
|------|----------------|
| 2015 | 63             |
| 2016 | 67             |
| 2017 | 50             |
| 2018 | 49             |
| 2019 | 58             |
| 2020 | 62             |



## Literature Cited

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