

# Marbled Murrelet Nesting Habitat Suitability Model for the British Columbia Coast

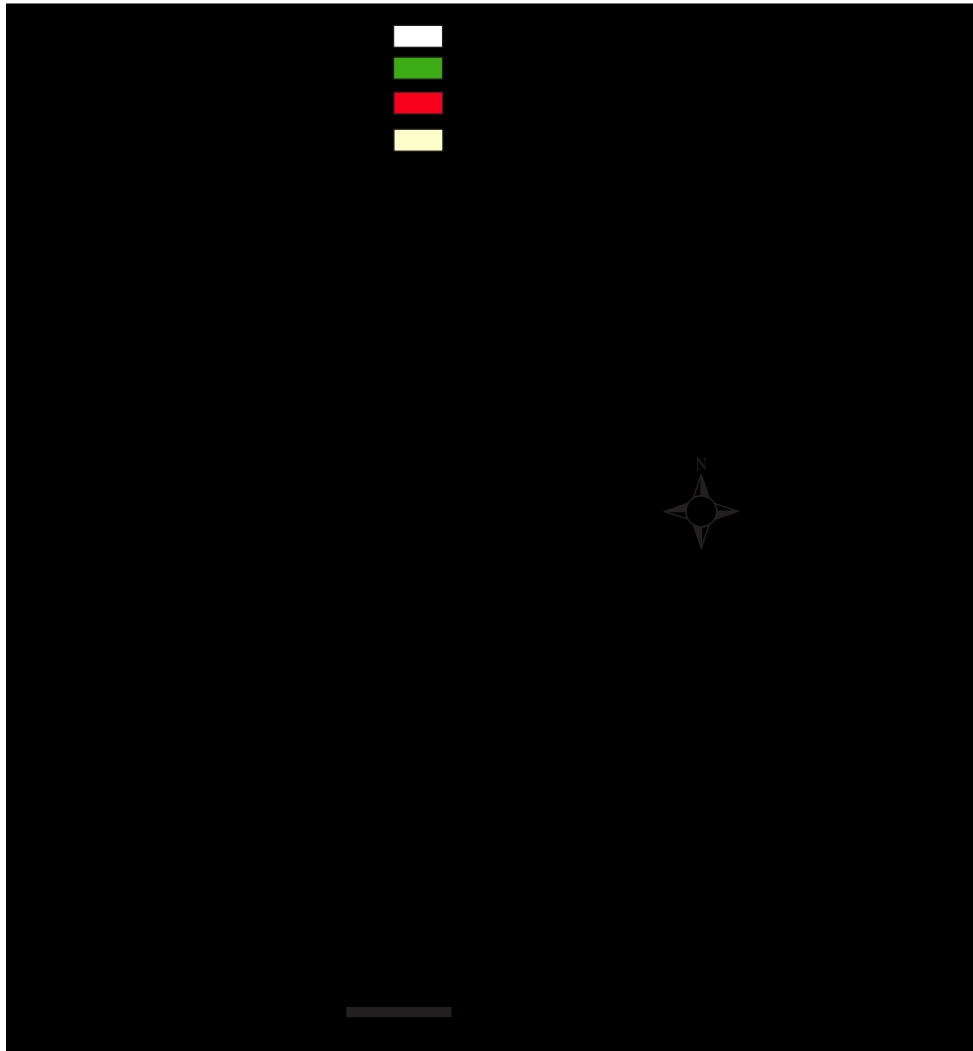
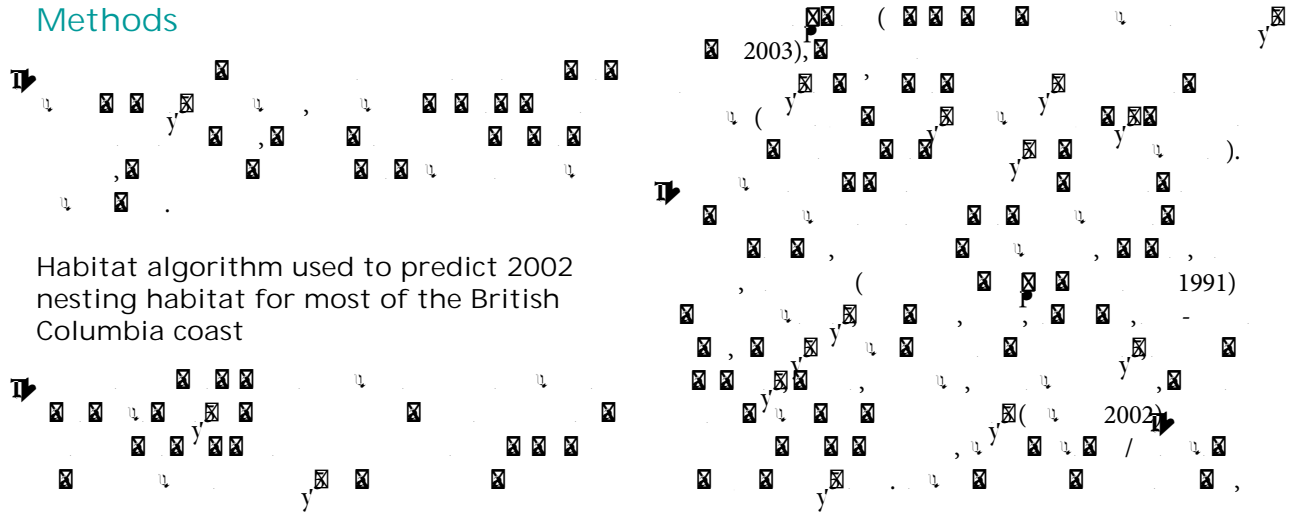
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## Abstract

**ABSTRACT** The Marbled Murrelet (*Brachyramphus marmoratus*) is a seabird that breeds on the Pacific Northwest coast of North America. It is a species of concern because of its declining population and restricted distribution. We developed a nesting habitat suitability model for the Marbled Murrelet based on a review of the literature and field observations. The model was developed using a maximum entropy approach and was validated using a cross-validation procedure. The model was applied to a 1:50,000 scale map of the Pacific Northwest coast of North America to identify potential nesting habitat. The model identified 1,234,567 km<sup>2</sup> of potential nesting habitat, which is equivalent to 1.2% of the total area of the Pacific Northwest coast of North America. The model was used to identify areas of high suitability for nesting habitat, which were found to be primarily in the coastal zone. The model was also used to identify areas of low suitability for nesting habitat, which were found to be primarily in the inland zone. The model was used to identify areas of moderate suitability for nesting habitat, which were found to be primarily in the coastal zone. The model was used to identify areas of high suitability for nesting habitat, which were found to be primarily in the coastal zone. The model was used to identify areas of low suitability for nesting habitat, which were found to be primarily in the inland zone. The model was used to identify areas of moderate suitability for nesting habitat, which were found to be primarily in the coastal zone.



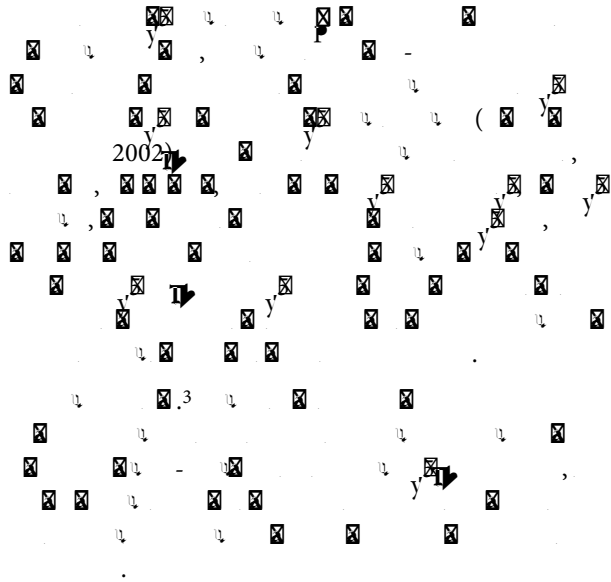
Methods



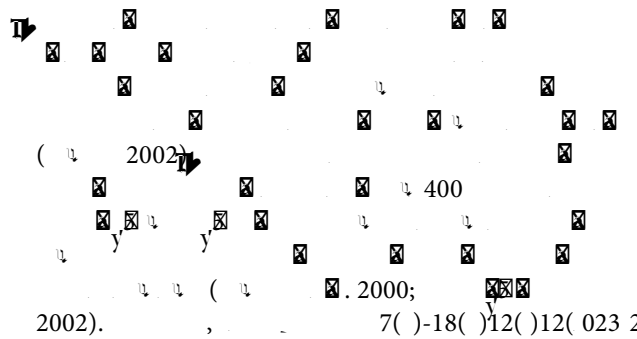
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1. The first part of the paper discusses the  
2. importance of the study of the  
3. history of the United States.  
4. The second part of the paper discusses  
5. the role of the government in the  
6. economy. The third part of the paper  
7. discusses the role of the courts in  
8. the legal system. The fourth part  
9. of the paper discusses the role of  
10. the media in society. The fifth part  
11. of the paper discusses the role of  
12. the military in the United States.  
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14. the role of the arts in society. The  
15. seventh part of the paper discusses  
16. the role of the sciences in society.  
17. The eighth part of the paper discusses  
18. the role of the environment in society.  
19. The ninth part of the paper discusses  
20. the role of the space program in society.

MARbled MURRELET NESTING HABITAT SUITABILITY MODEL



Additional geographic data



### Results

→ 2002  
1 980 846 ( 26%)  
515 411 ( 1).  
→ (82%)  
30 400  
→ 2008  
70% ( )  
2003).  
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### Testing the model: Comparing predicted amounts of habitat from the BC Model algorithm and aerial surveys

15 66 135  
48 981  
1 3  
( )  
→  
( $p = 0.107$ ; 2).

### Discussion

→ 2  
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*MATHER, CHATWIN, CRAGG,*



- To predict and track protected habitat by
- To evaluate and track various forest conservation
- To evaluate habitat loss from the 2002 baseline by
- To evaluate Marbled Murrelet nesting habitat

### Acknowledgements

### Conclusion

2002.



MARbled MURRELET NESTING HABITAT SUITABILITY MODEL

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### Glossary

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