**Supplementary Material 2 – OxCal Bayesian Model Code**

1. **Model A – Uniform Phase**

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("High Grade")

{

R\_Date("Blind15/Beta-488944", 5100, 30)

{

};

C\_Date("HG\_WallD", calBP(455), 63, 62)

{

};

C\_Date("HG\_WallB", calBP(179), 23, 22)

{

};

C\_Date("HG\_WallC", calBP(157), 19, 20)

{

};

C\_Date("HG\_WallA", calBP(146), 18, 17)

{

};

};

Phase("Trail Ridge")

{

R\_Date("Blind5/Beta-85363", 4590, 60)

{

};

R\_Date("Blind3/Beta-75998", 2610, 60)

{

};

};

Phase("Flattop Mountain")

{

R\_Date("Blind54/Beta-79746", 4310, 80)

{

};

R\_Date("Blind46/Beta-79744", 2620, 60)

{

};

R\_Date("Blind10/Beta-79739", 1740, 60)

{

};

R\_Date("Blind3/Beta-79737", 1600, 60)

{

};

R\_Date("Blind2/Beta-79736", 1570, 60)

{

};

R\_Date("Blind65/Beta-79747", 1550, 60)

{

};

R\_Date("Blind12/Beta-79740", 1550, 60)

{

};

R\_Date("Blind23/Beta-79741", 1290, 60)

{

};

R\_Date("Blind35/Beta-79743", 1240, 60)

{

};

R\_Date("Blind7/Beta-79738", 1210, 60)

{

};

R\_Date("Blind76/Beta-79748", 1190, 60)

{

};

R\_Date("Blind89/Beta-79750", 940, 60)

{

};

R\_Date("Blind33/Beta-79742", 880, 60)

{

};

C\_Date("Flattop\_WallD", calBP(766), 99, 96)

{

};

R\_Date("Blind51/Beta-79745", 240, 60)

{

};

R\_Date("Blind87/Beta-79749", 220, 60)

{

};

};

Phase("Devil's Thumb Pass")

{

R\_Date("Blind1/Beta-111215", 4100, 60)

{

};

R\_Date("Blind19/Beta-108954", 880, 50)

{

};

R\_Date("Blind8/Beta-125430", 730, 60)

{

};

C\_Date("DTPass\_Wall1", calBP(672), 90, 86)

{

};

R\_Date("Blind18/Beta-125429", 640, 50)

{

};

};

Phase("Olson")

{

R\_Date("Blind71/I-5709", 2785, 90)

{

};

C\_Date("Olson\_Wall1", calBP(1301), 142, 137)

{

};

C\_Date("Olson\_Wall2", calBP(817), 104, 101)

{

};

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

R\_Date("Blind3/Beta-57992", 2155, 55)

{

};

R\_Date("Blind5/Beta-96541", 1850, 50)

{

};

Phase("Blind 2")

{

R\_Date("Beta-67705", 950, 40)

{

};

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157)

{

};

C\_Date("S\_Wall10B", calBP(1608), 157, 151)

{

};

C\_Date("S\_Wall10", calBP(1461), 151, 145)

{

};

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145)

{

};

C\_Date("S\_Wall6", calBP(1235), 137, 133)

{

};

C\_Date("S\_Wall10C", calBP(1235), 137, 133)

{

};

C\_Date("S\_Wall4", calBP(1096), 128, 123)

{

};

C\_Date("S\_Wall5", calBP(1034), 123, 120)

{

};

C\_Date("S\_Wall8", calBP(751), 97, 95)

{

};

};

Phase("Bob Lake")

{

R\_Date("Blind12/Beta-96545", 1650, 50)

{

};

R\_Date("Blind9/Beta-96543", 1230, 50)

{

};

R\_Date("Blind11/Beta-96544", 1210, 50)

{

};

R\_Date("Blind3/Beta-96542", 310, 70)

{

};

R\_Date("Blind20/Beta-101398", 280, 60)

{

};

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

R\_Date("Blind1/M-1542", 970, 100)

{

};

C\_Date("M\_Wall1", calBP(870), 130, 90)

{

};

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83)

{

};

C\_Date("A\_WallE", calBP(628), 84, 82)

{

};

C\_Date("A\_WallG", calBP(572), 77, 76)

{

};

C\_Date("A\_WallH", calBP(551), 75, 73)

{

};

};

Phase("5CF499")

{

R\_Date("5CF499/Beta-24183", 350, 60)

{

};

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Model B – Uniform Phase w/ Outlier Models (Preferred)**

Options()

{

kIterations=1000;

};

Plot()

{

Outlier\_Model("Old Wood", Exp(1,-10,0), U(0,3), "t");

Outlier\_Model("General", T(5), U(0,4), "t");

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

R\_Date("Blind71/I-5709", 2785, 90)

{

Outlier("Old Wood", 1);

};

C\_Date("Olson\_Wall1", calBP(1301), 142, 137)

{

Outlier("General", 0.05);

};

C\_Date("Olson\_Wall2", calBP(817), 104, 101)

{

Outlier("General", 0.05);

};

R\_Date("UGA-11761", 140, 25)

{

Outlier("General", 0.05);

};

};

Phase("Devil's Thumb Valley")

{

R\_Date("Blind3/Beta-57992", 2155, 55)

{

Outlier("Old Wood", 1);

};

R\_Date("Blind5/Beta-96541", 1850, 50)

{

Outlier("General", 0.05);

};

Phase("Blind 2")

{

R\_Date("Beta-67705", 950, 40)

{

Outlier("Old Wood", 1);

};

R\_Date("Beta-68389", 765, 55)

{

Outlier("General", 0.05);

};

R\_Date("Beta-54909", 765, 55)

{

Outlier("General", 0.05);

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157)

{

Outlier("General", 0.05);

};

C\_Date("S\_Wall10B", calBP(1608), 157, 151)

{

Outlier("General", 0.05);

};

C\_Date("S\_Wall10", calBP(1461), 151, 145)

{

Outlier("General", 0.05);

};

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

Outlier("General", 0.05);

};

R\_Date("Beta-50909", 1180, 55)

{

Outlier("General", 0.05);

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145)

{

Outlier("General", 0.05);

};

C\_Date("S\_Wall6", calBP(1235), 137, 133)

{

Outlier("General", 0.05);

};

C\_Date("S\_Wall10C", calBP(1235), 137, 133)

{

Outlier("General", 0.05);

};

C\_Date("S\_Wall4", calBP(1096), 128, 123)

{

Outlier("General", 0.05);

};

C\_Date("S\_Wall5", calBP(1034), 123, 120)

{

Outlier("General", 0.05);

};

C\_Date("S\_Wall8", calBP(751), 97, 95)

{

Outlier("General", 0.05);

};

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

Outlier("General", 0.05);

};

R\_Date("Beta-24184", 720, 60)

{

Outlier("General", 0.05);

};

};

};

Phase("Murray")

{

R\_Date("Blind1/M-1542", 970, 100)

{

Outlier("Old Wood", 1);

};

C\_Date("M\_Wall1", calBP(870), 130, 90)

{

Outlier("General", 0.05);

};

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96)

{

Outlier("General", 0.05);

};

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90)

{

Outlier("General", 0.05);

};

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83)

{

Outlier("General", 0.05);

};

C\_Date("A\_WallE", calBP(628), 84, 82)

{

Outlier("General", 0.05);

};

C\_Date("A\_WallG", calBP(572), 77, 76)

{

Outlier("General", 0.05);

};

C\_Date("A\_WallH", calBP(551), 75, 73)

{

Outlier("General", 0.05);

};

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62)

{

Outlier("General", 0.05);

};

C\_Date("HG\_WallB", calBP(179), 23, 22)

{

Outlier("General", 0.05);

};

C\_Date("HG\_WallC", calBP(157), 19, 20)

{

Outlier("General", 0.05);

};

C\_Date("HG\_WallA", calBP(146), 18, 17)

{

Outlier("General", 0.05);

};

};

Phase("5CF499")

{

R\_Date("5CF499/Beta-24183", 350, 60)

{

Outlier("Old Wood", 1);

};

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B (population mean (μ) +/- 1σ)**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

R\_Simulate("SIM1", calBP(1330), 415);

C\_Simulate("SIM2", calBP(1300), 145);

C\_Simulate("SIM3", calBP(820), 110);

R\_Simulate("SIM4", calBP(205), 70);

};

Phase("Devil's Thumb Valley")

{

R\_Simulate("SIM5", calBP(1325), 415);

R\_Simulate("SIM6", calBP(1690), 145);

R\_Simulate("SIM7", calBP(545), 200);

R\_Simulate("SIM8", calBP(700), 55);

R\_Simulate("SIM9", calBP(700), 55);

};

Phase("Sawtooth")

{

C\_Simulate("SIM10", calBP(1625), 135);

C\_Simulate("SIM11", calBP(1560), 140);

C\_Simulate("SIM12", calBP(1450), 145);

R\_Simulate("SIM13", calBP(1265), 70);

R\_Simulate("SIM14", calBP(1100), 85);

C\_Simulate("SIM15", calBP(1270), 140);

C\_Simulate("SIM16", calBP(1240), 140);

C\_Simulate("SIM17", calBP(1240), 140);

C\_Simulate("SIM18", calBP(1110), 130);

C\_Simulate("SIM19", calBP(1030), 125);

C\_Simulate("SIM20", calBP(750), 105);

};

Phase("Water Dog Divide")

{

R\_Simulate("SIM21", calBP(970), 85);

R\_Simulate("SIM22", calBP(655), 60);

};

Phase("Murray")

{

R\_Simulate("SIM23", calBP(570), 220);

C\_Simulate("SIM24", calBP(870), 115);

};

Phase("Flattop Mountain")

{

C\_Simulate("SIM25", calBP(770), 100);

};

Phase("Devil's Thumb Pass")

{

C\_Simulate("SIM26", calBP(670), 100);

};

Phase("Arapaho Pass")

{

C\_Simulate("SIM27", calBP(640), 90);

C\_Simulate("SIM28", calBP(630), 90);

C\_Simulate("SIM29", calBP(570), 80);

C\_Simulate("SIM30", calBP(550), 80);

};

Phase("High Grade")

{

C\_Simulate("SIM31", calBP(460), 70);

C\_Simulate("SIM32", calBP(180), 20);

C\_Simulate("SIM33", calBP(165), 20);

C\_Simulate("SIM34", calBP(155), 15);

};

Phase("5CF499")

{

R\_Simulate("SIM35", calBP(260), 85);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 10 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(1722), 20);

R\_Simulate("SIM-2", calBP(1505), 20);

R\_Simulate("SIM-3", calBP(1216), 20);

R\_Simulate("SIM-4", calBP(2022), 20);

R\_Simulate("SIM-5", calBP(266), 20);

R\_Simulate("SIM-6", calBP(691), 20);

R\_Simulate("SIM-7", calBP(231), 20);

R\_Simulate("SIM-8", calBP(566), 20);

R\_Simulate("SIM-9", calBP(1713), 20);

R\_Simulate("SIM-10", calBP(140), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 20 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(446), 20);

R\_Simulate("SIM-2", calBP(933), 20);

R\_Simulate("SIM-3", calBP(714), 20);

R\_Simulate("SIM-4", calBP(963), 20);

R\_Simulate("SIM-5", calBP(1055), 20);

R\_Simulate("SIM-6", calBP(699), 20);

R\_Simulate("SIM-7", calBP(455), 20);

R\_Simulate("SIM-8", calBP(612), 20);

R\_Simulate("SIM-9", calBP(1292), 20);

R\_Simulate("SIM-10", calBP(1686), 20);

R\_Simulate("SIM-11", calBP(1233), 20);

R\_Simulate("SIM-12", calBP(1703), 20);

R\_Simulate("SIM-13", calBP(359), 20);

R\_Simulate("SIM-14", calBP(740), 20);

R\_Simulate("SIM-15", calBP(154), 20);

R\_Simulate("SIM-16", calBP(1870), 20);

R\_Simulate("SIM-17", calBP(278), 20);

R\_Simulate("SIM-18", calBP(246), 20);

R\_Simulate("SIM-19", calBP(1889), 20);

R\_Simulate("SIM-20", calBP(1076), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 30 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(1643), 20);

R\_Simulate("SIM-2", calBP(723), 20);

R\_Simulate("SIM-3", calBP(1968), 20);

R\_Simulate("SIM-4", calBP(96), 20);

R\_Simulate("SIM-5", calBP(453), 20);

R\_Simulate("SIM-6", calBP(752), 20);

R\_Simulate("SIM-7", calBP(933), 20);

R\_Simulate("SIM-8", calBP(1907), 20);

R\_Simulate("SIM-9", calBP(1723), 20);

R\_Simulate("SIM-10", calBP(162), 20);

R\_Simulate("SIM-11", calBP(498), 20);

R\_Simulate("SIM-12", calBP(440), 20);

R\_Simulate("SIM-13", calBP(1422), 20);

R\_Simulate("SIM-14", calBP(842), 20);

R\_Simulate("SIM-15", calBP(817), 20);

R\_Simulate("SIM-16", calBP(338), 20);

R\_Simulate("SIM-17", calBP(428), 20);

R\_Simulate("SIM-18", calBP(610), 20);

R\_Simulate("SIM-19", calBP(937), 20);

R\_Simulate("SIM-20", calBP(402), 20);

R\_Simulate("SIM-21", calBP(197), 20);

R\_Simulate("SIM-22", calBP(149), 20);

R\_Simulate("SIM-23", calBP(1348), 20);

R\_Simulate("SIM-24", calBP(1349), 20);

R\_Simulate("SIM-25", calBP(546), 20);

R\_Simulate("SIM-26", calBP(1164), 20);

R\_Simulate("SIM-27", calBP(1824), 20);

R\_Simulate("SIM-28", calBP(521), 20);

R\_Simulate("SIM-29", calBP(353), 20);

R\_Simulate("SIM-30", calBP(94), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 40 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(491), 20);

R\_Simulate("SIM-2", calBP(1400), 20);

R\_Simulate("SIM-3", calBP(1200), 20);

R\_Simulate("SIM-4", calBP(78), 20);

R\_Simulate("SIM-5", calBP(723), 20);

R\_Simulate("SIM-6", calBP(1136), 20);

R\_Simulate("SIM-7", calBP(512), 20);

R\_Simulate("SIM-8", calBP(1498), 20);

R\_Simulate("SIM-9", calBP(741), 20);

R\_Simulate("SIM-10", calBP(1989), 20);

R\_Simulate("SIM-11", calBP(100), 20);

R\_Simulate("SIM-12", calBP(1437), 20);

R\_Simulate("SIM-13", calBP(1374), 20);

R\_Simulate("SIM-14", calBP(1787), 20);

R\_Simulate("SIM-15", calBP(1279), 20);

R\_Simulate("SIM-16", calBP(717), 20);

R\_Simulate("SIM-17", calBP(450), 20);

R\_Simulate("SIM-18", calBP(491), 20);

R\_Simulate("SIM-19", calBP(437), 20);

R\_Simulate("SIM-20", calBP(992), 20);

R\_Simulate("SIM-21", calBP(1317), 20);

R\_Simulate("SIM-22", calBP(1927), 20);

R\_Simulate("SIM-23", calBP(1959), 20);

R\_Simulate("SIM-24", calBP(1912), 20);

R\_Simulate("SIM-25", calBP(946), 20);

R\_Simulate("SIM-26", calBP(900), 20);

R\_Simulate("SIM-27", calBP(402), 20);

R\_Simulate("SIM-28", calBP(1025), 20);

R\_Simulate("SIM-29", calBP(1380), 20);

R\_Simulate("SIM-30", calBP(1260), 20);

R\_Simulate("SIM-31", calBP(1190), 20);

R\_Simulate("SIM-32", calBP(405), 20);

R\_Simulate("SIM-33", calBP(437), 20);

R\_Simulate("SIM-34", calBP(931), 20);

R\_Simulate("SIM-35", calBP(815), 20);

R\_Simulate("SIM-36", calBP(161), 20);

R\_Simulate("SIM-37", calBP(976), 20);

R\_Simulate("SIM-38", calBP(878), 20);

R\_Simulate("SIM-39", calBP(1209), 20);

R\_Simulate("SIM-40", calBP(1183), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 50 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(1772), 20);

R\_Simulate("SIM-2", calBP(1445), 20);

R\_Simulate("SIM-3", calBP(1843), 20);

R\_Simulate("SIM-4", calBP(550), 20);

R\_Simulate("SIM-5", calBP(406), 20);

R\_Simulate("SIM-6", calBP(75), 20);

R\_Simulate("SIM-7", calBP(1196), 20);

R\_Simulate("SIM-8", calBP(1559), 20);

R\_Simulate("SIM-9", calBP(313), 20);

R\_Simulate("SIM-10", calBP(1568), 20);

R\_Simulate("SIM-11", calBP(1434), 20);

R\_Simulate("SIM-12", calBP(943), 20);

R\_Simulate("SIM-13", calBP(869), 20);

R\_Simulate("SIM-14", calBP(1417), 20);

R\_Simulate("SIM-15", calBP(1348), 20);

R\_Simulate("SIM-16", calBP(604), 20);

R\_Simulate("SIM-17", calBP(143), 20);

R\_Simulate("SIM-18", calBP(1598), 20);

R\_Simulate("SIM-19", calBP(1584), 20);

R\_Simulate("SIM-20", calBP(264), 20);

R\_Simulate("SIM-21", calBP(1785), 20);

R\_Simulate("SIM-22", calBP(1326), 20);

R\_Simulate("SIM-23", calBP(1134), 20);

R\_Simulate("SIM-24", calBP(322), 20);

R\_Simulate("SIM-25", calBP(1184), 20);

R\_Simulate("SIM-26", calBP(809), 20);

R\_Simulate("SIM-27", calBP(875), 20);

R\_Simulate("SIM-28", calBP(1331), 20);

R\_Simulate("SIM-29", calBP(174), 20);

R\_Simulate("SIM-30", calBP(97), 20);

R\_Simulate("SIM-31", calBP(1606), 20);

R\_Simulate("SIM-32", calBP(1084), 20);

R\_Simulate("SIM-33", calBP(1414), 20);

R\_Simulate("SIM-34", calBP(568), 20);

R\_Simulate("SIM-35", calBP(1246), 20);

R\_Simulate("SIM-36", calBP(437), 20);

R\_Simulate("SIM-37", calBP(1171), 20);

R\_Simulate("SIM-38", calBP(1464), 20);

R\_Simulate("SIM-39", calBP(1660), 20);

R\_Simulate("SIM-40", calBP(1674), 20);

R\_Simulate("SIM-41", calBP(80), 20);

R\_Simulate("SIM-42", calBP(240), 20);

R\_Simulate("SIM-43", calBP(737), 20);

R\_Simulate("SIM-44", calBP(366), 20);

R\_Simulate("SIM-45", calBP(1452), 20);

R\_Simulate("SIM-46", calBP(1465), 20);

R\_Simulate("SIM-47", calBP(606), 20);

R\_Simulate("SIM-48", calBP(1980), 20);

R\_Simulate("SIM-49", calBP(1426), 20);

R\_Simulate("SIM-50", calBP(313), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 60 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(380), 20);

R\_Simulate("SIM-2", calBP(1644), 20);

R\_Simulate("SIM-3", calBP(1278), 20);

R\_Simulate("SIM-4", calBP(1421), 20);

R\_Simulate("SIM-5", calBP(972), 20);

R\_Simulate("SIM-6", calBP(255), 20);

R\_Simulate("SIM-7", calBP(549), 20);

R\_Simulate("SIM-8", calBP(923), 20);

R\_Simulate("SIM-9", calBP(1744), 20);

R\_Simulate("SIM-10", calBP(1282), 20);

R\_Simulate("SIM-11", calBP(450), 20);

R\_Simulate("SIM-12", calBP(1695), 20);

R\_Simulate("SIM-13", calBP(759), 20);

R\_Simulate("SIM-14", calBP(861), 20);

R\_Simulate("SIM-15", calBP(1000), 20);

R\_Simulate("SIM-16", calBP(1072), 20);

R\_Simulate("SIM-17", calBP(1477), 20);

R\_Simulate("SIM-18", calBP(684), 20);

R\_Simulate("SIM-19", calBP(1487), 20);

R\_Simulate("SIM-20", calBP(589), 20);

R\_Simulate("SIM-21", calBP(1084), 20);

R\_Simulate("SIM-22", calBP(218), 20);

R\_Simulate("SIM-23", calBP(802), 20);

R\_Simulate("SIM-24", calBP(961), 20);

R\_Simulate("SIM-25", calBP(660), 20);

R\_Simulate("SIM-26", calBP(659), 20);

R\_Simulate("SIM-27", calBP(1982), 20);

R\_Simulate("SIM-28", calBP(949), 20);

R\_Simulate("SIM-29", calBP(1550), 20);

R\_Simulate("SIM-30", calBP(1662), 20);

R\_Simulate("SIM-31", calBP(862), 20);

R\_Simulate("SIM-32", calBP(470), 20);

R\_Simulate("SIM-33", calBP(1749), 20);

R\_Simulate("SIM-34", calBP(1983), 20);

R\_Simulate("SIM-35", calBP(1854), 20);

R\_Simulate("SIM-36", calBP(419), 20);

R\_Simulate("SIM-37", calBP(558), 20);

R\_Simulate("SIM-38", calBP(215), 20);

R\_Simulate("SIM-39", calBP(1027), 20);

R\_Simulate("SIM-40", calBP(1221), 20);

R\_Simulate("SIM-41", calBP(1643), 20);

R\_Simulate("SIM-42", calBP(762), 20);

R\_Simulate("SIM-43", calBP(1640), 20);

R\_Simulate("SIM-44", calBP(210), 20);

R\_Simulate("SIM-45", calBP(1954), 20);

R\_Simulate("SIM-46", calBP(1960), 20);

R\_Simulate("SIM-47", calBP(849), 20);

R\_Simulate("SIM-48", calBP(696), 20);

R\_Simulate("SIM-49", calBP(678), 20);

R\_Simulate("SIM-50", calBP(144), 20);

R\_Simulate("SIM-51", calBP(290), 20);

R\_Simulate("SIM-52", calBP(1439), 20);

R\_Simulate("SIM-53", calBP(1073), 20);

R\_Simulate("SIM-54", calBP(361), 20);

R\_Simulate("SIM-55", calBP(1152), 20);

R\_Simulate("SIM-56", calBP(1263), 20);

R\_Simulate("SIM-57", calBP(216), 20);

R\_Simulate("SIM-58", calBP(1237), 20);

R\_Simulate("SIM-59", calBP(1344), 20);

R\_Simulate("SIM-60", calBP(1245), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 70 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(1267), 20);

R\_Simulate("SIM-2", calBP(920), 20);

R\_Simulate("SIM-3", calBP(1782), 20);

R\_Simulate("SIM-4", calBP(2026), 20);

R\_Simulate("SIM-5", calBP(822), 20);

R\_Simulate("SIM-6", calBP(1485), 20);

R\_Simulate("SIM-7", calBP(539), 20);

R\_Simulate("SIM-8", calBP(1970), 20);

R\_Simulate("SIM-9", calBP(469), 20);

R\_Simulate("SIM-10", calBP(1879), 20);

R\_Simulate("SIM-11", calBP(1839), 20);

R\_Simulate("SIM-12", calBP(126), 20);

R\_Simulate("SIM-13", calBP(1358), 20);

R\_Simulate("SIM-14", calBP(551), 20);

R\_Simulate("SIM-15", calBP(1667), 20);

R\_Simulate("SIM-16", calBP(226), 20);

R\_Simulate("SIM-17", calBP(1437), 20);

R\_Simulate("SIM-18", calBP(1367), 20);

R\_Simulate("SIM-19", calBP(359), 20);

R\_Simulate("SIM-20", calBP(1568), 20);

R\_Simulate("SIM-21", calBP(1038), 20);

R\_Simulate("SIM-22", calBP(1393), 20);

R\_Simulate("SIM-23", calBP(1205), 20);

R\_Simulate("SIM-24", calBP(1984), 20);

R\_Simulate("SIM-25", calBP(2007), 20);

R\_Simulate("SIM-26", calBP(1292), 20);

R\_Simulate("SIM-27", calBP(1080), 20);

R\_Simulate("SIM-28", calBP(212), 20);

R\_Simulate("SIM-29", calBP(703), 20);

R\_Simulate("SIM-30", calBP(1333), 20);

R\_Simulate("SIM-31", calBP(1101), 20);

R\_Simulate("SIM-32", calBP(1549), 20);

R\_Simulate("SIM-33", calBP(1237), 20);

R\_Simulate("SIM-34", calBP(832), 20);

R\_Simulate("SIM-35", calBP(664), 20);

R\_Simulate("SIM-36", calBP(1991), 20);

R\_Simulate("SIM-37", calBP(774), 20);

R\_Simulate("SIM-38", calBP(969), 20);

R\_Simulate("SIM-39", calBP(1065), 20);

R\_Simulate("SIM-40", calBP(1441), 20);

R\_Simulate("SIM-41", calBP(1523), 20);

R\_Simulate("SIM-42", calBP(351), 20);

R\_Simulate("SIM-43", calBP(1414), 20);

R\_Simulate("SIM-44", calBP(1593), 20);

R\_Simulate("SIM-45", calBP(1476), 20);

R\_Simulate("SIM-46", calBP(1690), 20);

R\_Simulate("SIM-47", calBP(1146), 20);

R\_Simulate("SIM-48", calBP(1278), 20);

R\_Simulate("SIM-49", calBP(227), 20);

R\_Simulate("SIM-50", calBP(581), 20);

R\_Simulate("SIM-51", calBP(603), 20);

R\_Simulate("SIM-52", calBP(920), 20);

R\_Simulate("SIM-53", calBP(1315), 20);

R\_Simulate("SIM-54", calBP(232), 20);

R\_Simulate("SIM-55", calBP(1388), 20);

R\_Simulate("SIM-56", calBP(1133), 20);

R\_Simulate("SIM-57", calBP(1719), 20);

R\_Simulate("SIM-58", calBP(879), 20);

R\_Simulate("SIM-59", calBP(1696), 20);

R\_Simulate("SIM-60", calBP(1726), 20);

R\_Simulate("SIM-61", calBP(1494), 20);

R\_Simulate("SIM-62", calBP(446), 20);

R\_Simulate("SIM-63", calBP(1579), 20);

R\_Simulate("SIM-64", calBP(94), 20);

R\_Simulate("SIM-65", calBP(879), 20);

R\_Simulate("SIM-66", calBP(392), 20);

R\_Simulate("SIM-67", calBP(163), 20);

R\_Simulate("SIM-68", calBP(634), 20);

R\_Simulate("SIM-69", calBP(116), 20);

R\_Simulate("SIM-70", calBP(213), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 80 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(221), 20);

R\_Simulate("SIM-2", calBP(1541), 20);

R\_Simulate("SIM-3", calBP(590), 20);

R\_Simulate("SIM-4", calBP(946), 20);

R\_Simulate("SIM-5", calBP(465), 20);

R\_Simulate("SIM-6", calBP(859), 20);

R\_Simulate("SIM-7", calBP(1987), 20);

R\_Simulate("SIM-8", calBP(1183), 20);

R\_Simulate("SIM-9", calBP(1557), 20);

R\_Simulate("SIM-10", calBP(1034), 20);

R\_Simulate("SIM-11", calBP(858), 20);

R\_Simulate("SIM-12", calBP(1542), 20);

R\_Simulate("SIM-13", calBP(1585), 20);

R\_Simulate("SIM-14", calBP(536), 20);

R\_Simulate("SIM-15", calBP(618), 20);

R\_Simulate("SIM-16", calBP(956), 20);

R\_Simulate("SIM-17", calBP(1341), 20);

R\_Simulate("SIM-18", calBP(498), 20);

R\_Simulate("SIM-19", calBP(1866), 20);

R\_Simulate("SIM-20", calBP(1396), 20);

R\_Simulate("SIM-21", calBP(1652), 20);

R\_Simulate("SIM-22", calBP(627), 20);

R\_Simulate("SIM-23", calBP(279), 20);

R\_Simulate("SIM-24", calBP(1537), 20);

R\_Simulate("SIM-25", calBP(1809), 20);

R\_Simulate("SIM-26", calBP(1500), 20);

R\_Simulate("SIM-27", calBP(605), 20);

R\_Simulate("SIM-28", calBP(1535), 20);

R\_Simulate("SIM-29", calBP(1593), 20);

R\_Simulate("SIM-30", calBP(766), 20);

R\_Simulate("SIM-31", calBP(823), 20);

R\_Simulate("SIM-32", calBP(243), 20);

R\_Simulate("SIM-33", calBP(1687), 20);

R\_Simulate("SIM-34", calBP(797), 20);

R\_Simulate("SIM-35", calBP(922), 20);

R\_Simulate("SIM-36", calBP(1007), 20);

R\_Simulate("SIM-37", calBP(838), 20);

R\_Simulate("SIM-38", calBP(676), 20);

R\_Simulate("SIM-39", calBP(1118), 20);

R\_Simulate("SIM-40", calBP(963), 20);

R\_Simulate("SIM-41", calBP(1496), 20);

R\_Simulate("SIM-42", calBP(1428), 20);

R\_Simulate("SIM-43", calBP(781), 20);

R\_Simulate("SIM-44", calBP(1491), 20);

R\_Simulate("SIM-45", calBP(787), 20);

R\_Simulate("SIM-46", calBP(1332), 20);

R\_Simulate("SIM-47", calBP(491), 20);

R\_Simulate("SIM-48", calBP(693), 20);

R\_Simulate("SIM-49", calBP(138), 20);

R\_Simulate("SIM-50", calBP(1964), 20);

R\_Simulate("SIM-51", calBP(656), 20);

R\_Simulate("SIM-52", calBP(697), 20);

R\_Simulate("SIM-53", calBP(387), 20);

R\_Simulate("SIM-54", calBP(1334), 20);

R\_Simulate("SIM-55", calBP(1545), 20);

R\_Simulate("SIM-56", calBP(1984), 20);

R\_Simulate("SIM-57", calBP(122), 20);

R\_Simulate("SIM-58", calBP(1765), 20);

R\_Simulate("SIM-59", calBP(406), 20);

R\_Simulate("SIM-60", calBP(1904), 20);

R\_Simulate("SIM-61", calBP(1902), 20);

R\_Simulate("SIM-62", calBP(401), 20);

R\_Simulate("SIM-63", calBP(992), 20);

R\_Simulate("SIM-64", calBP(95), 20);

R\_Simulate("SIM-65", calBP(423), 20);

R\_Simulate("SIM-66", calBP(1452), 20);

R\_Simulate("SIM-67", calBP(266), 20);

R\_Simulate("SIM-68", calBP(1268), 20);

R\_Simulate("SIM-69", calBP(1927), 20);

R\_Simulate("SIM-70", calBP(596), 20);

R\_Simulate("SIM-71", calBP(576), 20);

R\_Simulate("SIM-72", calBP(2006), 20);

R\_Simulate("SIM-73", calBP(1822), 20);

R\_Simulate("SIM-74", calBP(1395), 20);

R\_Simulate("SIM-75", calBP(859), 20);

R\_Simulate("SIM-76", calBP(588), 20);

R\_Simulate("SIM-77", calBP(1646), 20);

R\_Simulate("SIM-78", calBP(343), 20);

R\_Simulate("SIM-79", calBP(1916), 20);

R\_Simulate("SIM-80", calBP(1678), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};

1. **Simulations – Model B + 90 random radiocarbon dates**

Options()

{

kIterations=1000;

};

Plot()

{

Phase()

{

Sequence()

{

Boundary("Start Game Drives")

{

color="green";

};

Phase("Game Drives")

{

KDE\_Plot("KDE")

{

};

Sum()

{

};

Phase("Olson")

{

C\_Date("Olson\_Wall1", calBP(1301), 142, 137);

C\_Date("Olson\_Wall2", calBP(817), 104, 101);

R\_Date("UGA-11761", 140, 25)

{

};

};

Phase("Devil's Thumb Valley")

{

Phase("Blind 2")

{

R\_Date("Beta-68389", 765, 55)

{

};

R\_Date("Beta-54909", 765, 55)

{

};

};

};

Phase("Sawtooth")

{

C\_Date("S\_Wall1", calBP(1727), 161, 157);

C\_Date("S\_Wall10B", calBP(1608), 157, 151);

C\_Date("S\_Wall10", calBP(1461), 151, 145);

Phase("Blind D-6")

{

R\_Date("Beta-50908", 1365, 65)

{

};

R\_Date("Beta-50909", 1180, 55)

{

};

};

C\_Date("S\_Wall3", calBP(1265), 139, 145);

C\_Date("S\_Wall6", calBP(1235), 137, 133);

C\_Date("S\_Wall10C", calBP(1235), 137, 133);

C\_Date("S\_Wall4", calBP(1096), 128, 123);

C\_Date("S\_Wall5", calBP(1034), 123, 120);

C\_Date("S\_Wall8", calBP(751), 97, 95);

};

Phase("Water Dog Divide")

{

Phase("Blind 1")

{

R\_Date("Beta-24185", 1060, 60)

{

};

R\_Date("Beta-24184", 720, 60)

{

};

};

};

Phase("Murray")

{

C\_Date("M\_Wall1", calBP(870), 130, 90);

};

Phase("Flattop Mountain")

{

C\_Date("Flattop\_WallD", calBP(766), 99, 96);

};

Phase("Devil's Thumb Pass")

{

C\_Date("DTPass\_Wall1", calBP(672), 90, 86);

};

Phase("Arapaho Pass")

{

C\_Date("A\_WallI", calBP(636), 85, 83);

C\_Date("A\_WallE", calBP(628), 84, 82);

C\_Date("A\_WallG", calBP(572), 77, 76);

C\_Date("A\_WallH", calBP(551), 75, 73);

};

Phase("High Grade")

{

C\_Date("HG\_WallD", calBP(455), 63, 62);

C\_Date("HG\_WallB", calBP(179), 23, 22);

C\_Date("HG\_WallC", calBP(157), 19, 20);

C\_Date("HG\_WallA", calBP(146), 18, 17);

};

Phase("Simulation")

{

R\_Simulate("SIM-1", calBP(1533), 20);

R\_Simulate("SIM-2", calBP(932), 20);

R\_Simulate("SIM-3", calBP(935), 20);

R\_Simulate("SIM-4", calBP(1901), 20);

R\_Simulate("SIM-5", calBP(1725), 20);

R\_Simulate("SIM-6", calBP(783), 20);

R\_Simulate("SIM-7", calBP(1148), 20);

R\_Simulate("SIM-8", calBP(138), 20);

R\_Simulate("SIM-9", calBP(1592), 20);

R\_Simulate("SIM-10", calBP(1030), 20);

R\_Simulate("SIM-11", calBP(1948), 20);

R\_Simulate("SIM-12", calBP(630), 20);

R\_Simulate("SIM-13", calBP(1981), 20);

R\_Simulate("SIM-14", calBP(395), 20);

R\_Simulate("SIM-15", calBP(821), 20);

R\_Simulate("SIM-16", calBP(705), 20);

R\_Simulate("SIM-17", calBP(900), 20);

R\_Simulate("SIM-18", calBP(847), 20);

R\_Simulate("SIM-19", calBP(990), 20);

R\_Simulate("SIM-20", calBP(603), 20);

R\_Simulate("SIM-21", calBP(652), 20);

R\_Simulate("SIM-22", calBP(1523), 20);

R\_Simulate("SIM-23", calBP(167), 20);

R\_Simulate("SIM-24", calBP(1063), 20);

R\_Simulate("SIM-25", calBP(655), 20);

R\_Simulate("SIM-26", calBP(360), 20);

R\_Simulate("SIM-27", calBP(1274), 20);

R\_Simulate("SIM-28", calBP(593), 20);

R\_Simulate("SIM-29", calBP(502), 20);

R\_Simulate("SIM-30", calBP(992), 20);

R\_Simulate("SIM-31", calBP(1874), 20);

R\_Simulate("SIM-32", calBP(148), 20);

R\_Simulate("SIM-33", calBP(1072), 20);

R\_Simulate("SIM-34", calBP(751), 20);

R\_Simulate("SIM-35", calBP(2027), 20);

R\_Simulate("SIM-36", calBP(992), 20);

R\_Simulate("SIM-37", calBP(531), 20);

R\_Simulate("SIM-38", calBP(177), 20);

R\_Simulate("SIM-39", calBP(1271), 20);

R\_Simulate("SIM-40", calBP(607), 20);

R\_Simulate("SIM-41", calBP(1961), 20);

R\_Simulate("SIM-42", calBP(420), 20);

R\_Simulate("SIM-43", calBP(1192), 20);

R\_Simulate("SIM-44", calBP(1774), 20);

R\_Simulate("SIM-45", calBP(1737), 20);

R\_Simulate("SIM-46", calBP(1626), 20);

R\_Simulate("SIM-47", calBP(1630), 20);

R\_Simulate("SIM-48", calBP(762), 20);

R\_Simulate("SIM-49", calBP(1158), 20);

R\_Simulate("SIM-50", calBP(626), 20);

R\_Simulate("SIM-51", calBP(1397), 20);

R\_Simulate("SIM-52", calBP(508), 20);

R\_Simulate("SIM-53", calBP(984), 20);

R\_Simulate("SIM-54", calBP(1666), 20);

R\_Simulate("SIM-55", calBP(805), 20);

R\_Simulate("SIM-56", calBP(1700), 20);

R\_Simulate("SIM-57", calBP(1881), 20);

R\_Simulate("SIM-58", calBP(1626), 20);

R\_Simulate("SIM-59", calBP(1541), 20);

R\_Simulate("SIM-60", calBP(948), 20);

R\_Simulate("SIM-61", calBP(852), 20);

R\_Simulate("SIM-62", calBP(396), 20);

R\_Simulate("SIM-63", calBP(563), 20);

R\_Simulate("SIM-64", calBP(1679), 20);

R\_Simulate("SIM-65", calBP(366), 20);

R\_Simulate("SIM-66", calBP(455), 20);

R\_Simulate("SIM-67", calBP(1950), 20);

R\_Simulate("SIM-68", calBP(706), 20);

R\_Simulate("SIM-69", calBP(879), 20);

R\_Simulate("SIM-70", calBP(570), 20);

R\_Simulate("SIM-71", calBP(942), 20);

R\_Simulate("SIM-72", calBP(270), 20);

R\_Simulate("SIM-73", calBP(303), 20);

R\_Simulate("SIM-74", calBP(1954), 20);

R\_Simulate("SIM-75", calBP(1864), 20);

R\_Simulate("SIM-76", calBP(254), 20);

R\_Simulate("SIM-77", calBP(1162), 20);

R\_Simulate("SIM-78", calBP(1171), 20);

R\_Simulate("SIM-79", calBP(1702), 20);

R\_Simulate("SIM-80", calBP(1440), 20);

R\_Simulate("SIM-81", calBP(103), 20);

R\_Simulate("SIM-82", calBP(511), 20);

R\_Simulate("SIM-83", calBP(1757), 20);

R\_Simulate("SIM-84", calBP(992), 20);

R\_Simulate("SIM-85", calBP(1396), 20);

R\_Simulate("SIM-86", calBP(1582), 20);

R\_Simulate("SIM-87", calBP(1150), 20);

R\_Simulate("SIM-88", calBP(1347), 20);

R\_Simulate("SIM-89", calBP(1303), 20);

R\_Simulate("SIM-90", calBP(910), 20);

};

Interval("Duration Game Drives");

};

Boundary("End Game Drives")

{

color="red";

};

Before("Maximum Extent")

{

Date(" After Meeker", 1880);

};

};

};

};