

Data Repository Item 95--  
Appendix 1

Ordovician through Permian  
Eastern Ocean Basin  
Carbonate Platforms:  
Western North America

Appendix to:  
Barred Basins: A Model for Eastern Ocean Basin Carbonate Platforms

Michael T. Whalen

Period	Epoch/North American Series	Formation	Location	Tropical Indicators	Platform Type & Thickness	References
Pennsylvanian/Permian	Leonardian-Guadalupian	Park City Fm.	N Utah, W Wyoming, SE Idaho, E Nevada	coated grains, ooids, evaporites, Phylloid algae	Ramp ~200 m	Peterson, 1984; Stevens, 1991; Whalen, 1993
	Leonardian-Guadalupian	Park City Grp. (Kaibab, Plympton Fms., Gerster LS)	E Nevada, W Utah, N Arizona	ooids, evaporites	Ramp ~300 m	Hose and Repenning, 1959; Baars, 1962; Irwin, 1971; Wardlaw and Collinson, 1978; Cheevers and Rawson, 1979; Stevens, 1991
	Wolfcampian-Leonardian	McCloud LS	N California	Phylloid and Dasyclad algae, ooids, stromatolites 27 cm/ka accumulation rate	Isolated Platform ~800 m	Miller, 1987; Watkins, 1993
	Missourian-Wolfcampian	Snaky Canyon Fm.	C Idaho	Phylloid algae, ooids, grapestones, stromatolites	Ramp ~700 m	Skipp et al., 1979; Breuninger et al., 1989; Canter and Isaacson, 1991; Ross, 1991
	Chesterian-Desmoinesian	Ely LS	E Nevada, W Utah, E California		Attached Platform ~350 m	Stevens, 1986; Hintze, 1988; Ross, 1991
Mississippian	Chesterian	Surrett Canyon Fm.	C Idaho	calcispheres	Attached Platform ~200 m	Mamet et al., 1971; Poole and Sandberg, 1977; Skipp and Hall, 1980
	Meramecian-Chesterian	White Knob LS	C Idaho		Attached Platform	Sando et al., 1976; Poole and Sandberg, 1977, 1991; Skipp and Hall, 1980
	Meramecian-Chesterian	Scott Peak Fm	C Idaho	ooids, calcareous algae, calcispheres	Attached Platform ~400 m	Mamet et al., 1971; Sando et al., 1976; Poole and Sandberg, 1977, 1991; Skipp and Hall, 1980
	Meramecian-Chesterian	Monroe Canyon LS	NW Utah, SE Idaho		Attached Platform ~300 m	Sando et al., 1976; Poole and Sandberg, 1977, 1991; Skipp and Hall, 1980
	Meramecian-Chesterian	Ochre Mtn. LS	WC Utah		Attached Platform	Poole and Sandberg, 1977, 1991
	Meramecian-Chesterian	Great Blue LS	WC Utah, SE Idaho		Attached Platform ~350 m	Sando et al., 1976; Poole and Sandberg, 1977, 1991; Skipp and Hall, 1980
	Meramecian	Humbug Fm.	WC Utah	ooids	Attached Platform ~200 m	Sandberg and Gutschick, 1980; Poole and Sandberg, 1977, 1991
	Osagean-Meramecian	Mission Canyon Fm.	W & C Montana	ooids, evaporites	Attached Platform ~300 m	Rose, 1976; Poole and Sandberg, 1977, 1991; Peterson, 1986
	Osagean-Meramecian	Brazer Dolomite	NE Utah		Attached Platform ~250 m	Rose, 1976; Poole and Sandberg, 1977, 1991
	Osagean-Meramecian	Redwall LS	S Utah, S Nevada, W Arizona	ooids, oncoids, stromatolites, calcareous algae, calcispheres, massive rugose corals	Attached Platform ~300 m	McKee and Gutschick, 1969; Poole and Sandberg, 1977, 1991; Gutschick et al., 1980; Kent and Rawson, 1980; Hintze, 1988
	Osagean-Meramecian	Leadville LS	E Utah, SW Colorado		Attached Platform ~125 m	Armstrong and Mamet, 1976; Poole and Sandberg, 1977, 1991; Hintze, 1988
	Osagean-Meramecian	Perdido Fm. Santa Rosa Hills LS	EC California		Attached Platform ~700 m	Stevens, 1986; Poole and Sandberg, 1991
	Kinderhookian-Osagean	Gardison LS	W & C Utah	24 cm/ka accumulation rate	Attached Platform ~150 m	Rose, 1976; Poole and Sandberg, 1977; Gutschick et al., 1980
	Kinderhookian-Osagean	Fitchville Fm.	W & C Utah		Attached Platform ~70 m	Rose, 1976; Poole and Sandberg, 1977; Gutschick et al., 1980
	Kinderhookian-Meramecian	Monte Cristo LS (Anchor, Bullion, Arrowhead, and Yellowpine LS)	SE Nevada	<i>Lithostrotionella</i> biostromes	Attached Platform ~425 m	Langenheim et al., 1962; Rose, 1976; Poole and Sandberg, 1991
	Kinderhookian-Osagean	Lodgepole Fm.	S Idaho, W Montana, N Utah	ooids, calcispheres, evaporites	Ramp ~250 m	Rose, 1976; Poole and Sandberg, 1977; Hintze, 1988; Elrick and Read, 1991
	Kinderhookian-Osagean	Joana LS	C Idaho, W Utah, S, E, & NC Nevada		Isolated Platform ~100 m	Chilingar and Bissell, 1957; Poole and Sandberg, 1977, 1991; Hintze, 1988
	Kinderhookian-Osagean	Tin Mtn. LS	EC California	massive rugose corals	Attached Platform ~250 m	Poole and Sandberg, 1977, 1991; Stevens, 1986
Devonian	Famennian	Palliser, Wabumun Fms.	C & W Alberta	ooids	Ramp ~250 m	deWit and McLaren, 1950; Andrichuck, 1960.
	Givetian - Famennian	Grosmont Fm.	NC & NE Alberta	coated grains, oncrites, stromatoporoid reefs, evaporites	Attached Platform ~170 m	Cutler, 1983; Moore, 1989a & b.
	Frasnian	Arrow Canyon Fm.	SE Nevada	stromatoporoids	Attached Platform ~325 m	Langenheim et al., 1962; Poole et al., 1977
	Frasnian	Cooking Lake, Leduc & Nisku Fm.	C Alberta	coated grains, oncrites, stromatoporoid reefs, calcareous algae	Isolated and Attached Platforms ~350 m	Klovan, 1964; Moore, 1989a & b; Wendte et al., 1992

Devonian	Frasnian	Flume, Cairn, Southesk Fm.	W Alberta	coated grains, oncoides, stromatoporoid reefs, calcareous algae, stromatolites, calcispheres	Isolated and Attached Platforms ~400 m	Klovan, 1974; Moore, 1989 a & b; Mountjoy, 1989; Geldsetzer, 1989; McLean and Mountjoy, 1993;
	Givetian	Swan Hills Fm.	C Alberta	coated grains, oncoids, stromatoporoid reefs	Attached & Isolated Platforms ~140 m	Fischbuch, 1968; Moore, 1989a & b; Wendte et al., 1992
	Givetian - Frasnian	Jefferson Fm.	SE Idaho, W Montana	oids, stromatoporoids, stromatolites	Attached Platform ~200 m	Isaacson et al., 1989; Dorobek, 1991; Johnson et al., 1991
	Givetian - Frasnian	Hyrum Fm.	SC Idaho, NE Utah		Attached Platform ~300 m	Johnson et al., 1991; Hintze, 1988
	Givetian - Frasnian	Guilmette Fm.	S & EC Nevada, SW & C Utah	oids, stromatolites, stromatoporoid floatstone	Attached Platform ~600 m	Poole et al., 1977; Hintze, 1988; Larsen et al., 1989; Johnson et al., 1991
	Givetian - Frasnian	Devils Gate LS	C Nevada	stromatoporoid boundstone	Attached Platform ~360 m	Carlisle et al., 1957; Murphy and Dunham, 1977; Poole et al., 1977; Johnson et al., 1977, 1991
	Eifelian - Givetian	Bay State Dolomite	C Nevada	oids	Attached Platform/ Ramp ~200 m	Johnson, 1962; Johnson and Murphy, 1984; Johnson et al., 1991; Elrick, 1995
	Eifelian - Givetian	Keg River Fm.	C Alberta	stromatoporoid reefs, evaporites	Attached & Isolated Platforms, ~200 m	Moore, 1989; Wendte et al., 1992
	Eifelian - Givetian	Denay LS	C Nevada	oids, stromatoporoid buildups	Attached Platform/ Ramp ~300 m	Poole et al., 1977; Johnson et al., 1991; Elrick, 1995
	Eifelian - Givetian	Lost Burro Fm.	EC California	stromatoporoids	Attached Platform ~450 m	Poole et al., 1977; Stevens, 1986
	Eifelian	Sentinal Mtn. Dolomite	C Nevada	stromatoporoid buildups	Attached Platform/ Ramp ~200 m	Johnson, 1962; Johnson and Murphy, 1984; Johnson et al., 1991; Elrick, 1995
	Eifelian	Woodpecker LS	C Nevada		Attached Platform/ Ramp ~120 m	Johnson, 1962; Johnson and Murphy, 1984; Johnson et al., 1991; Elrick, 1995
	Emsian - Givetian	Simonson Dolomite	E Nevada, W Utah	oids, stromatoporoid buildups	Attached Platform/ Ramp ~300 m	Johnson, 1962; Poole et al., 1977; Hintze, 1988; Johnson et al., 1991; Elrick, 1995
	Lochkovian-Eifelian	McColley Canyon Fm.	C Nevada		Ramp ~150 m	Johnson, 1962; Murphy and Gronberg, 1970; Johnson and Murphy, 1984
Silurian/Lower Devonian	Ludlovian - Lochkovian	Hidden Valley Dolomite	EC California	calcareous algae	Attached Platform ~250 m	McAllister, 1974; Poole et al., 1977; Stevens, 1986
	Ludlovian - Lochkovian	Vaughn Gulch LS	EC California	Dasyclad algae, stromatoporoids	Attached Platform ~400 m	Stevens, 1986
	Ludlovian - Lochkovian	Beacon Peak Dolomite	C & E Nevada		Attached Platform ~200 m	Johnson et al., 1981; Kendall et al., 1983; Johnson and Murphy, 1984; Johnson et al., 1991
	Ludlovian - Lochkovian	Lone Mtn. Dolomite	C & E Nevada, SE Idaho	oids, oncoids, calcareous algae, stromatoporoids, algal laminites	Attached Platform ~450 m	Winterer and Murphy, 1960; Nichols and Silberling, 1977; Johnson et al., 1991
	Ludlovian - Lochkovian	Sevy Dolomite	SE & C Nevada, NC Utah	algal laminites	Attached Platform ~200 m	Poole et al., 1977; Johnson et al., 1991; Hintze, 1988
Ordovician/Silurian	Llandovery - Wenlock	Laketown Dolomite	SE Idaho, W & N Utah	grapestones, stromatolites, Dasyclad algae	Ramp ~300 m	Poole et al., 1977; Sheehan, 1980; Hintze, 1988; Sheehan and Boucot, 1991
	Ashgill - Llandovery	Hanson Creek Fm.	NE Nevada	oids, oncoids, stromatolites, stromatoporoids	Ramp ~150 m	Dunham, 1977; Sheehan and Boucot, 1991
	Ashgill - Llandovery	Ely Springs Dolomite	C & S Nevada, EC California	<i>Favistella</i> biostromes, oncoids	Ramp ~200 m	Langenheim et al., 1962; Poole et al., 1977; Stevens, 1986; Hintze, 1988

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