

## APPENDIX 30—PROBABLE FOSSIL YIELD CLASSIFICATION (PFYC), BY FORMATION, STATE OF WYOMING

**Table A30-1. Probable Fossil Yield Classification (PFYC), By Formation,  
State of Wyoming**

Formation	Age	Class <sup>1</sup>	Geologic Map <sup>2</sup>
Adaville Formation	Upper Cretaceous	3	Kav
Alcova Limestone	Middle Triassic	3	TRc, TRPcg, TRPjs, MzPz
Almond Formation	Upper Cretaceous	3	Kal, Kmv
Amsden Formation	Pennsylvanian to Upper Mississippian	3	PIPMa, PIPM, PM, MzPz
Ankareh Formation	Upper and Lower Triassic	3	JTRnd, TRad
Aspen Shale or Formation	Lower Cretaceous	3	Ka
Arikaree Group or Formation	Miocene and Oligocene	5	Tmo
Aycross Formation	Middle Eocene	5	Ta
Bacon Ridge Sandstone	Upper Cretaceous	3	Kb, Ksb
Battle Spring Formation	Eocene to Upper Paleocene	3	Tbs
Baxter Shale	Upper Cretaceous	3	Kba
Bearpaw Formation	Upper Cretaceous	3	Kfb, Klm
Bear River Formation	Lower Cretaceous	3	Kbr
Belle Fourche Shale	Upper Cretaceous	3	Kgb, Kgbm
Bighorn Dolomite	Upper Ordovician	2	Ob, DO, OC, MDO, MO, Pzr
Bishop Conglomerate	Oligocene	3	Tbi
Blair Formation	Upper Cretaceous	3	Kbl
Blind Bull Formation	Upper Cretaceous	3	Kbb
Bridger Formation	Middle Eocene	5	Tb
Browns Park Formation	Late to Middle Miocene	2	Tm
Brule Formation	Oligocene	5	Twrb, Twr
Bug Formation	Pleistocene to Pliocene	2	QTb
Caldwell Canyon Volcanics	Pliocene and Miocene	2	Tcv
Cambrian Units	Cambrian	2	Cr, Pzr
Camp Davis Formation	Middle Miocene	2	Tcd
Carlile Shale	Upper Cretaceous	3	Kcl, Knc
Casper Formation	Permian to Pennsylvanian	3	PIPc, PIPcf, PIPM, MzPz
Chadron Formation	Oligocene and Eocene	5	Twrc, Twr
Chugwater Group or Formation	Triassic	3	JTRnd, JTRgc, TRc, TRcd, TRPcg, TRPjs, MzPz
Cloverly Formation	Lower Cretaceous	5	KJ, KJs, KJg, KTR, MzPz
Coalmont Formation	Eocene and Paleocene	3	Tco
Cody Shale	Upper Cretaceous	3	Kc, Kcf
Cokeville Formation	Lower Cretaceous	3	Kss
Colter Formation	Lower Miocene	2	Tc
Conant Creek Tuff	Upper Miocene	2	Tcc
Crandall Conglomerate	Lower Eocene	3	Tcr
Crooks Gap Conglomerate	Middle Eocene	3	Tcg
Crow Mountain Sandstone	Upper Triassic	3	TRc, TRPcg, TRPjs, MzPz
Darby Formation	Mississippian to Devonian	2	MD, MDO, Pzr
Deadwood Formation	Ordovician to Cambrian	2	OC, Pzr
Devils Basin Formation	Upper Paleocene	3	Tdb
Dinwoody Formation	Lower Triassic	3	JTRnd, TRad, TRcd, TRPcg, MzPz
Eagle Sandstone	Upper Cretaceous	3	Ket
Ellis Group	Upper to Middle Jurassic	3	KJk
Englewood Limestone	Lower Mississippian to Lower Devonian	3	MDe, Pzr

Formation	Age	Class	Geologic Map
Ericson Sandstone	Upper Cretaceous	3	Ke
Evanston Formation	Paleocene to Upper Cretaceous	3	TKe
Everts Formation	Upper Cretaceous	3	Ket
Fall River Formation	Lower Cretaceous	3	KJ
Ferris Formation	Paleocene to Upper Cretaceous	5	TKf
Flathead Sandstone	Middle Cambrian	2	OC, Cr, Pzr
Forelle Limestone	Permian	2	TRPjs, Pfs
Fort Union Formation	Paleocene	3	Tfu, Tft, Tfit, Tfl, Tftl, Tftr
Fountain Formation	Upper to Middle Pennsylvanian	2	PIPcf
Fowkes Formation	Pliocene? and Eocene	3	Tf
Fox Hills Formation	Upper Cretaceous	3	Kfh, Kfl, Kfb, Klm
Frontier Formation	Upper Cretaceous	3	Kf, Kft, Kcf, Knt
Gallatin Group or Limestone	Upper Cambrian	2	OC, Cr, Pzr
Gannett Group	Lower Cretaceous	3	Kg
Glacial Deposits	Holocene and Pleistocene	1	Qg
Goose Egg Formation	Lower Triassic to Permian	2	TRPg, TRPcg, MzPz
Greenhorn Formation	Upper Cretaceous	3	Kgb, Kgbm
Green River Formation	Middle to Lower Eocene	5	Tgl, Tglu, Tgrw, Tgt, Tgw, Tgwt, Twg
Gros Ventre Formation	Upper and Middle Cambrian	2	OC, Cr, Pzr
Guernsey Formation	Upper Devonian	2	MDg
Gypsum Spring Formation	Middle Jurassic	3	KJg, KTR, Jsg, Jst, JTR, JTRgn, JTRnd, JTRgc, MzPz
Hanna Formation	Upper Paleocene	5	Tha
Harebell Formation	Upper Cretaceous	3	Kha
Hartville Formation	Permian to Mississippian(?)	3	PIPh
Heart Lake Conglomerate	Pliocene	2	Thl
Hilliard Shale	Upper Cretaceous	3	Kh
Hoback Formation	Paleocene	5	Th
Hominy Peak Formation	Upper Eocene	3	Thp
Ice Point Conglomerate	Upper Eocene	3	Tip
Indian Meadows Formation	Lower Eocene	5	Tim, Twim
Inyan Kara Group	Lower Cretaceous	3	KJ
Jefferson Formation	Upper Devonian	2	MD, DO, MDO
Jelm Formation	Upper Triassic	3	TRc, TRPjs
Kootenai Formation	Upper Cretaceous	3	KJk
Laketown Dolomite	Upper and Middle Silurian	2	Sl
Lakota Formation	Lower Cretaceous	3	KJ
Lance Formation	Upper Cretaceous	5	Kl, Klm
Landslide Creek Formation	Upper Cretaceous	5	Klc
Langford Formation	Eocene	2	Ttl, Tts
Lebo Member	Middle Paleocene	3	Tfl, Tftl, Tfit
Lewis Shale	Upper Cretaceous	3	Kle, Kfl, Klm, Kml
Lodgepole Formation	Lower Mississippian	3	PIPM, Mm, MD, MDO, MO, Pzr
Madison Limestone	Mississippian through Upper Devonian	3	Mm, PIPM, MD, MDO, MO, Pzr
Meagher Limestone	Middle Cambrian	2	OC
Medicine Bow Formation	Upper Cretaceous	3	Kmb
Meeteetse Formation	Upper Cretaceous	3	Km, Klm, Kml
Mesaverde Group or Formation	Upper Cretaceous	3	Kmv, Kal, Ke, Kr, Kbl
Minnekahta Limestone	Permian	3	Pm, Pmo, Pzr
Minnelusa Formation	Pennsylvanian	2	PIPm, Pzr
Mission Canyon Formation	Mississippian	3	PIPM, Mm, MD, MDO, MO, Pzr
Moonstone Formation	Upper Miocene	3	Tmu
Morrison Formation	Upper Jurassic	5	KJk, KJ, KJs, KJg, KTR, MzPz

Formation	Age	Class	Geologic Map
Mowry Shale	Lower Cretaceous	3	Kmr, Kmt, Knt, Kgbm, Kft
Newcastle Sandstone	Lower Cretaceous	3	Kns
Niobrara Formation	Upper Cretaceous	5	Kn, Ksn, Knt, Knc
North Park Formation	Upper Miocene	3	Tmu
Norwood Tuff	Pliocene (?) and Eocene	3	Tf
Nugget Sandstone	Jurassic(?) and Triassic(?)	3	JTRn, JTRnd, KTR, JTR, JTRgn, JTRgc, MzPz
Ogallala Group or Formation	Pliocene to Miocene	5	Tmu
Opeche Shale	Permian	2	Pmo, Pzr
Pahasapa Limestone	Mississippian	2	Pzr, MDe
Park Shale	Middle Cambrian	2	OC
Pass Peak Formation	Lower Eocene	3	Tp
Phosphoria Formation	Permian	3	Pp, PIPMa, MzPz
Pierre Shale	Upper Cretaceous	3	Kp
Pinyon Conglomerate	Paleocene to Upper Cretaceous	3	TKp
Popo Agie Member	Upper Triassic	3	TRc, TRPcg, TRPjs, MzPz
Preuss Formation or Sandstone	Upper to Middle Jurassic	3	Jst
Quadrant Formation	Pennsylvanian	2	PIPMa
Quealy Formation	Lower Cretaceous	3	Kss
Red Peak Member	Lower Triassic	2	TRc, TRPcg, TRPjs, MzPz
Rierdon Formation	Upper Jurassic	3	KJk
Rock Springs Formation	Upper Cretaceous	3	Kr
Sage Junction Formation	Lower Cretaceous	3	Kss
Salt Lake Formation	Pliocene and Miocene	3	Tsl
Satanka Shale	Permian	2	TRPjs, Pfs
Sawtooth Formation	Upper Jurassic	3	KJk
Shooting Iron Formation	Pliocene	2	Tsi
Skull Creek Shale	Lower Cretaceous	3	Kns
Smiths Formation	Lower Cretaceous	3	Kss, Kws
Sohare Formation	Upper Cretaceous	3	Kso, Ksb
South Pass Formation	Upper Miocene	3	Tmu
Spearfish Formation	Upper Triassic to Upper Permian	2	TRPs
Split Rock Formation	Middle to Early Miocene	3	
Steele Shale	Upper Cretaceous	3	Ks, Ksn
Stump Formation	Upper to Middle Jurassic	3	Jst
Sundance Formation	Upper Jurassic	5	Js, KJs, KJg, KTR, Jsg, JTR, MzPz
Sunlight Group	Upper Eocene	1	Ts, Tts
Swift Formation	Upper Jurassic	3	KJk
Tatman Formation	Lower Eocene	5	Tta
Teewinot Formation	Upper Miocene	3	Tte
Telegraph Creek Formation	Upper Cretaceous	3	Ket
Tensleep Sandstone	Permian to Pennsylvanian	2	PIPMa, PM, MzPz
Tepee Trail Formation	Upper Eocene	5	Tt
Tertiary, undiff.	Pliocene to Oligocene	3	Tu
Thaynes Limestone	Lower Triassic	3	JTRnd, TRad
Thermopolis Shale	Lower Cretaceous	3	Kmt, Kft, Knt
Thomas Fork Formation	Lower Cretaceous	3	Kss
Three Forks Formation	Upper Devonian	2	MD, DO, MDO
Tongue River Member	Upper Paleocene	3	Tftr, Tftl
Tullock Member	Lower Paleocene	3	Tft, Tfit
Twin Creek Limestone	Upper to Middle Jurassic	3	Jst
Two Ocean Formation	Eocene	2	Ttl, Tts
Wagon Bed Formation	Middle Eocene	5	Twb
Wapiti Formation	Upper Eocene	1	Twp, Tts, Ts

Formation	Age	Class	Geologic Map
Wasatch Formation	Lower Eocene	5	Tw, Tgc, Tgrw, Twc, Twd, Twg, Twk, Twlc, Twm, Twmo, Twn
Washakie Formation	Upper Eocene	5	Twa
Washburn Group	Middle Eocene	1	Taw
Wayan Formation	Lower Cretaceous	3	Kws
Wells Formation	Permian to Pennsylvanian	3	PIPma, PIPM
White River Group	Oligocene and Eocene	5	Twr, Twrb, Twrc, Twru, Tmo
Whitewood Dolomite	Upper Ordovician	2	OC, Pzr
Wiggins Formation	Upper Eocene	5	Twi
Willwood Formation	Lower Eocene	5	Twl
Wind River Formation	Lower Eocene	5	Twdr, Twim
Winnipeg Formation	Middle Ordovician	2	OC, Pzr
Wolsey Shale	Middle Cambrian	2	OC
Woodside Formation or Shale	Lower Triassic	3	JTRnd, TRad

## Notes:

<sup>1</sup> Ross Secord, Northern Great Plains Probable Fossil Yield Classification Report, *Univ. of Wyoming, 1996*; Peter Robinson, David Daitch, and Jennifer Haessig, Fossil Vertebrate Localities of Southwestern Wyoming: A Literature Search, Locality Record, and Formation Evaluation, *Univ. of Colorado Museum, BLM Contract KAA 000002, 2002*; professional judgment by Dale Hanson, Regional Paleontologist, Wyoming State Office, BLM, 2002.

<sup>2</sup> As the geologic map uses special characters not available in standard font sets, the following existing characters, which seemed close to geologic symbols, were used (D. Hanson, 2002): TR–Triassic Period; IP–Pennsylvanian Period; C–Cambrian Period; @–Proterozoic and late Archean times. All other symbols are the same as those commonly used in geologic mapping.

Source: Geologic Map of Wyoming. Compiled by Love and Christiansen, 1985.