

NATURAL HISTORY

Monday January 18, 2016

Los Angeles



Bonhams

NATURAL HISTORY

Monday January 18, 2016 at 10am

Los Angeles

BONHAMS

7601 W. Sunset Boulevard
Los Angeles, California 90046
bonhams.com

PREVIEW

Friday January 15, 12pm to 5pm
Saturday January 16, 12pm to 5pm
Sunday January 17, 12pm to 5pm

BIDS

+1 (323) 850 7500
+1 (323) 850 6090 fax

To bid via the internet please visit
www.bonhams.com/23217

Please note that telephone bids must be submitted no later than 4pm on the day prior to the auction. New bidders must also provide proof of identity and address when submitting bids. Telephone bidding is only available for lots with a low estimate in excess of \$1000.

Please contact client services with any bidding inquiries.

Please see pages 2 to 6 for bidder information including Conditions of Sale, after-sale collection and shipment.

SALE NUMBER: 23217
Lots 1000 - 1172

CATALOG: \$35

INQUIRIES

Thomas Lindgren
Co-Consulting Director
+1 (323) 436 5437
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Claudia Florian, G.J.G.
Natural History Department
Co-consulting Director
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Automated Results Service
+1 (800) 223 2854

ILLUSTRATIONS

Front cover: Lot 1107
First session page: Lot 1004
Second session page: Lot 1099
Back cover: Lot 118

OFFSITE SOLD PROPERTY STORAGE INFORMATION

Please note that all lots listed at the beginning of our printed catalog, if not removed immediately after the sale, will be transferred to a nearby storage facility. For the convenience of the successful bidder of one or more of these lots, all purchased lots will be transferred to our offsite storage together. Please read the Conditions of Sale regarding the removal of sold lots.

Bonhams' storage and logistics partner is Box Brothers, a well-known organization that specializes in crating, packaging and shipping.

Our storage and logistics partnership provides several beneficial services. The first being 5 days of free storage.

- During this auction, clients will be expected to pick up all property from Bonhams by 5pm on Wednesday January 20, 2016.
- All items listed at the beginning of our printed catalog, along with all other items purchased, if not removed immediately after the sale, will be transferred to Box Brothers warehouse. With an appointment made 24 hours in advance, clients can pick up their property at 220 W. Ivy Ave, Unit C in Inglewood.
- Box Brothers will charge an uplift fee to transport your items to their warehouse. Small items that can be handled easily by one person will be charged \$50. Larger items that can still be handled by one person will be charged \$85. Large items that require two people to handle will be charged \$100. Charges will be payable directly to Box Brothers. Should you choose to have Box Brothers ship or deliver your property, this uplift fee will be waived.
- Clients will have 5 days of free storage to retrieve their property or make arrangements with Box Brothers to pack and ship their property. Storage fees will begin to accrue on the 6th day of storage.
- Retrieval from the offsite warehouse is by appointment only. Clients must call 24 hours in advance. Clients can utilize the delivery services offered by Box Brothers or clients may make their own arrangements. Please call +1 (800) 474-7447.
- Box Brothers is available to ship internationally. They offer importing and exporting services. Clients can select either airfreight or ocean cargo delivery options, which range from door-to-port, door-to-airport with door-to-door service also available. Clients can ship one item, co-load or container load at a discounted rate through Box Brothers. Please call +1 (800) 474-7447 for more information.
- All purchases not designated for offsite storage will remain onsite at Bonhams for a period of 21 days beginning the date of the auction. During this 21 day period, clients may remove such property themselves, make arrangements with the Bonhams packaging and shipping department or provide their own shipper for removal of all property. If a client does not retrieve his/her property or finalize shipping arrangements within 21 days, the purchases will be removed to the offsite storage facility of Box Brothers. Again, uplift charges for packing and transport from our gallery to Box Brothers will be charged by Box Brothers.
- Payment of the hammer price, premium and any applicable sales taxes must be made directly to Bonhams prior to the release of property. Any removal, storage or other fees due to Box Brothers should be made directly to Box Brothers.
- Change of shipping address must be authorized by Bonhams Revenue Manager, Martin Romero, before Box Brothers will be permitted to re-route your purchases.

LOTS TO BE REMOVED TO STORAGE:

1022	1065	1084
1023	1066	1085
1024	1067	1086
1025	1068	1087
1026	1069	1088
1027	1070	1089
1029	1071	1090
1030	1072	1091
1041	1073	1094
1045	1074	1098
1046	1075	1099
1047	1076	1104
1048	1077	1109
1049	1079	1110
1058	1080	1111
1059	1081	1119
1060	1082	1120
1061	1083	

CONDITIONS OF SALE

The following Conditions of Sale, as amended by any published or posted notices or verbal announcements during the sale, constitute the entire terms and conditions on which property listed in the catalog shall be offered for sale or sold by Bonhams & Butterfields Auctioneers Corp. and any consignor of such property for whom we act as agent. If live online bidding is available for the subject auction, additional terms and conditions of sale relating to online bidding will apply; see www.bonhams.com/WebTerms for the supplemental terms. As used herein, "Bonhams," "we" and "us" refer to Bonhams & Butterfields Auctioneers Corp.

1. As used herein, the term "bid price" means the price at which a lot is successfully knocked down to the purchaser. The term "purchase price" means the aggregate of (a) the bid price, (b) a PREMIUM retained by us and payable by the purchaser EQUAL TO 25% OF THE FIRST \$100,000 OF THE BID PRICE, 20% OF THE AMOUNT OF THE BID PRICE ABOVE \$100,000 UP TO AND INCLUDING \$2,000,000, AND 12% OF THE AMOUNT OF THE BID PRICE OVER \$2,000,000, and (c) unless the purchaser is exempt by law from the payment thereof, any California, Arizona, Colorado, Connecticut, Florida, Georgia, Illinois, Massachusetts, Nevada, New York, Pennsylvania, Texas, Washington, D.C., Washington state, or other state or local sales tax (or compensating use tax) and other applicable taxes.

2. On the fall of the auctioneer's hammer, the highest bidder shall have purchased the offered lot in accordance and subject to compliance with all of the conditions set forth herein and (a) assumes full risk and responsibility therefor, (b) if requested will sign a confirmation of purchase, and (c) will pay the purchase price in full or such part as we may require for all lots purchased. No lot may be transferred. Any person placing a bid as agent on behalf of another (whether or not such person has disclosed that fact or the identity of the principal) may be jointly and severally liable with the principal under any contract resulting from the acceptance of a bid.

Unless otherwise agreed, payment in good funds is due and payable within five (5) business days following the auction sale. Whenever the purchaser pays only a part of the total purchase price for one or more lots purchased, we may apply such payments, in our sole discretion, to the lot or lots we choose. Payment will not be deemed made in full until we have collected good funds for all amounts due.

Payment for purchases may be made in or by (a) cash, (b) cashier's check or money order, (c) personal check with approved credit drawn on a U.S. bank, (d) wire transfer or other immediate bank transfer, or (e) Visa, MasterCard, American Express or Discover credit, charge or debit card. A processing fee will be assessed on any returned checks. Please note that the amount of cash notes and cash equivalents that can be accepted from a given purchaser may be limited.

The purchaser grants us a security interest in the property, and we may retain as collateral security for the purchaser's obligations to us, any property and all monies held or received by us for the account of the purchaser, in our possession. We retain all rights of a secured party under the California Commercial Code. If the foregoing conditions or any other applicable conditions herein are not complied with, in addition to other remedies available to us and the consignor by law, including without limitation, the right to hold the purchaser liable for the purchase price, we at our option may either (a) cancel the sale, retaining as liquidated damages all payments made by the purchaser or (b) resell the property, either publicly or privately, and in such

event the purchaser shall be liable for the payment of any deficiency plus all costs and expenses of both sales, our commission at our standard rates, all other charges due hereunder, attorneys' fees, expenses and incidental damages. In addition, where two or more amounts are owed in respect of different transactions by the purchaser to us, to Bonhams 1793 Limited and/or to any of our other affiliates, subsidiaries or parent companies worldwide within the Bonhams Group, we reserve the right to apply any monies paid in respect of a transaction to discharge any amount owed by the purchaser. If all fees, commissions, premiums, bid price and other sums due to us from the purchaser are not paid promptly as provided in these Conditions of Sale, we reserve the right to impose a finance charge equal to 1.5% per month on all amounts due to us beginning on the 31st day following the sale until payment is received, in addition to other remedies available to us by law.

3. We reserve the right to withdraw any property and to divide and combine lots at any time before such property's auction. Unless otherwise announced by the auctioneer at the time of sale, all bids are per lot as numbered in the catalog and no lots shall be divided or combined for sale.

4. We reserve the right to reject a bid from any bidder, to split any bidding increment, and to advance the bidding in any manner the auctioneer may decide. In the event of any dispute between bidders, or in the event the auctioneer doubts the validity of any bid, the auctioneer shall have sole and final discretion either to determine the successful bidder or to re-offer and resell the article in dispute. If any dispute arises after the sale, our sales records shall be conclusive in all respects.

5. If we are prevented by fire, theft or any other reason whatsoever from delivering any property to the purchaser or a sale otherwise cannot be completed, our liability shall be limited to the sum actually paid therefor by the purchaser and shall in no event include any compensatory, incidental or consequential damages.

6. If a lot is offered subject to a reserve, we may implement such reserve by bidding on behalf of the consignor, whether by opening bidding or continuing bidding in response to other bidders until reaching the reserve. If we have an interest in an offered lot and the proceeds therefrom other than our commissions, we may bid therefor to protect such interest. **CONSIGNORS ARE NOT ALLOWED TO BID ON THEIR OWN ITEMS.**

7. All statements contained in the catalog or in any bill of sale, condition report, invoice or elsewhere as to authorship, period, culture, source, origin, measurement, quality, rarity, provenance, importance, exhibition and literature of historical relevance, or physical condition **ARE QUALIFIED STATEMENTS OF OPINION AND NOT REPRESENTATIONS OR WARRANTIES.** No employee or agent of Bonhams is authorized to make on our behalf or on that of the consignor any representation or warranty, oral or written, with respect to any property.

8. All purchased property shall be removed from the premises at which the sale is conducted by the date(s) and time(s) set forth in the "Buyer's Guide" portion of this catalog. Property designated with a "W" and associated purchased lots, if not removed promptly following sale, will be transferred to an offsite warehouse at the purchaser's risk and expense, as set forth in more detail in the "Buyer's Guide." Purchased property that is permitted to remain onsite at Bonhams' facility should be removed at the purchaser's expense not later than 5:00 p.m. Pacific Time five (5) business days following the date of the sale. If not so removed, a storage fee of \$5.00 per lot per day will

be payable to us by the purchaser beginning at the close of the 21st day following the sale, and we may thereafter transfer such property to an offsite warehouse at the purchaser's risk and expense. Accounts must be settled in full before property will be released. Packing and handling of purchased lots are the responsibility of the purchaser. Bonhams can provide packing and shipping services for certain items as noted in the "Buyer's Guide" section of the catalog.

9. The copyright in the text of the catalog and the photographs, digital images and illustrations of lots in the catalog belong to Bonhams or its licensors. You will not reproduce or permit anyone else to reproduce such text, photographs, digital images or illustrations without our prior written consent.

10. These Conditions of Sale shall bind the successors and assigns of all bidders and purchasers and inure to the benefit of our successors and assigns. No waiver, amendment or modification of the terms hereof (other than posted notices or oral announcements during the sale) shall bind us unless specifically stated in writing and signed by us. If any part of these Conditions of Sale is for any reason invalid or unenforceable, the rest shall remain valid and enforceable.

11. These Conditions of Sale and the purchaser's and our respective rights and obligations hereunder are governed by the laws of the State of California. By bidding at an auction, each purchaser and bidder agrees to be bound by these Conditions of Sale. Any dispute, controversy or claim arising out of or relating to this agreement, or the breach, termination or validity thereof, brought by or against Bonhams (but not including claims brought against the consignor by the purchaser of lots consigned hereunder) shall be resolved by the procedures set forth below.

MEDIATION AND ARBITRATION PROCEDURES

(a) Within 30 days of written notice that there is a dispute, the parties or their authorized and empowered representatives shall meet by telephone and/or in person to mediate their differences. If the parties agree, a mutually acceptable mediator shall be selected and the parties will equally share such mediator's fees. The mediator shall be a retired judge or an attorney familiar with commercial law and trained in or qualified by experience in handling mediations. Any communications made during the mediation process shall not be admissible in any subsequent arbitration, mediation or judicial proceeding. All proceedings and any resolutions thereof shall be confidential, and the terms governing arbitration set forth in paragraph (c) below shall govern.

(b) If mediation does not resolve all disputes between the parties, or in any event no longer than 60 days after receipt of the written notice of dispute referred to above, the parties shall submit the dispute for binding arbitration before a single neutral arbitrator. Such arbitrator shall be a retired judge or an attorney familiar with commercial law and trained in or qualified by experience in handling arbitrations. Such arbitrator shall make all appropriate disclosures required by law. The arbitrator shall be drawn from a panel of a national arbitration service agreed to by the parties, and shall be selected as follows: (i) If the national arbitration service has specific rules or procedures, those rules or procedures shall be followed; (ii) If the national arbitration service does not have rules or procedures for the selection of an arbitrator, the arbitrator shall be an individual jointly agreed to by the parties. If the parties cannot agree on a national arbitration service, the arbitration shall be conducted by the American Arbitration Association, and the arbitrator

CONDITIONS OF SALE - CONTINUED

shall be selected in accordance with the Rules of the American Arbitration Association. The arbitrator's award shall be in writing and shall set forth findings of fact and legal conclusions.

(c) Unless otherwise agreed to by the parties or provided by the published rules of the national arbitration service:

(i) the arbitration shall occur within 60 days following the selection of the arbitrator;

(ii) the arbitration shall be conducted in the designated location, as follows: (A) in any case in which the subject auction by Bonhams took place or was scheduled to take place in the State of New York or Connecticut or the Commonwealth of Massachusetts, the arbitration shall take place in New York City, New York; (B) in all other cases, the arbitration shall take place in the city of San Francisco, California; and

(iii) discovery and the procedure for the arbitration shall be as follows:

(A) All arbitration proceedings shall be confidential;

(B) The parties shall submit written briefs to the arbitrator no later than 15 days before the arbitration commences;

(C) Discovery, if any, shall be limited as follows: (I) Requests for no more than 10 categories of documents, to be provided to the requesting party within 14 days of written request therefor; (II) No more than two (2) depositions per party, provided however, the deposition(s) are to be completed within one (1) day; (III) Compliance with the above shall be enforced by the arbitrator in accordance with California law;

(D) Each party shall have no longer than eight (8) hours to present its position. The entire hearing before the arbitrator shall not take longer than three (3) consecutive days;

(E) The award shall be made in writing no more than 30 days following the end of the proceeding. Judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction thereof.

To the fullest extent permitted by law, and except as required by applicable arbitration rules, each party shall bear its own attorneys' fees and costs in connection with the proceedings and shall share equally the fees and expenses of the arbitrator.

LIMITED RIGHT OF RESCISSION

If within one (1) year from the date of sale, the original purchaser (a) gives written notice to us alleging that the identification of Authorship (as defined below) of such lot as set forth in the **BOLD TYPE** heading of the catalog description of such lot (as amended by any saleroom notices or verbal announcements during the sale) is not substantially correct based on a fair reading of the catalog (including the terms of any glossary contained therein), and (b) within 10 days after such notice returns the lot to us in the same condition as at the time of sale, and (c) establishes the allegation in the notice to our satisfaction (including by providing one or more written opinions by recognized experts in the field, as we may reasonably require), then the sale of such lot will be rescinded and, unless we have already paid to the consignor monies owed him in connection with the sale, the original purchase price will be refunded.

If, prior to receiving such notice from the original purchaser alleging such defect, we have paid the consignor monies owed him in connection with the sale, we shall pay the original purchaser the amount of our commissions, any other sale proceeds to which we are entitled and applicable taxes received from the purchaser on the sale and make demand on the consignor to pay the balance of the original purchase price to the original purchaser. Should the consignor fail to pay such amount promptly, we may disclose the identity of the consignor and assign to the original purchaser our rights against the consignor with respect to the lot the sale of which is sought to be rescinded. Upon such disclosure and assignment, any liability of Bonhams as consignor's agent with respect to said lot shall automatically terminate.

The foregoing limited right of rescission is available to the original purchaser only and may not be assigned to or relied upon by any subsequent transferee of the property sold. The purchaser hereby accepts the benefit of the consignor's warranty of title and other representations and warranties made by the consignor for the purchaser's benefit. Nothing in this section shall be construed as an admission by us of any representation of fact, express or implied, obligation or responsibility with respect to any lot. **THE PURCHASER'S SOLE AND EXCLUSIVE**

REMEDY AGAINST BONHAMS FOR ANY REASON WHATSOEVER IS THE LIMITED RIGHT OF RESCISSION DESCRIBED IN THIS SECTION.

"Authorship" means only the identity of the creator, the period, culture and source or origin of the lot, as the case may be, as set forth in the **BOLD TYPE** heading of the print catalog entry. The right of rescission does not extend to: (a) works of art executed before 1870 (unless these works are determined to be counterfeits created since 1870), as this is a matter of current scholarly opinion which can change; (b) titles, descriptions, or other identification of offered lots, which information normally appears in lower case type below the **BOLD TYPE** heading identifying the Authorship; (c) Authorship of any lot where it was specifically mentioned that there exists a conflict of specialist or scholarly opinion regarding the Authorship of the lot at the time of sale; (d) Authorship of any lot which as of the date of sale was in accordance with the then generally-accepted opinion of scholars and specialists regarding the same; or (e) the identification of periods or dates of creation in catalog descriptions which may be proven inaccurate by means of scientific processes that are not generally accepted for use until after publication of the catalog in which the property is offered or that were unreasonably expensive or impractical to use at the time of such publication.

LIMITATION OF LIABILITY

EXCEPT AS EXPRESSLY PROVIDED ABOVE, ALL PROPERTY IS SOLD "AS IS." NEITHER BONHAMS NOR THE CONSIGNOR MAKES ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE MERCHANTABILITY, FITNESS OR CONDITION OF THE PROPERTY OR AS TO THE CORRECTNESS OF DESCRIPTION, GENUINENESS, ATTRIBUTION, PROVENANCE OR PERIOD OF THE PROPERTY OR AS TO WHETHER THE PURCHASER ACQUIRES ANY COPYRIGHTS OR OTHER INTELLECTUAL PROPERTY RIGHTS IN LOTS SOLD OR AS TO WHETHER A WORK OF ART IS SUBJECT TO THE ARTIST'S MORAL RIGHTS OR OTHER RESIDUAL RIGHTS OF THE ARTIST. THE PURCHASER EXPRESSLY ACKNOWLEDGES AND AGREES THAT IN NO EVENT SHALL BONHAMS BE LIABLE FOR ANY DAMAGES INCLUDING, WITHOUT LIMITATION, ANY COMPENSATORY, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

SELLER'S GUIDE

SELLING AT AUCTION

Bonhams can help you every step of the way when you are ready to sell art, antiques and collectible items at auction. Our regional offices and representatives throughout the US are available to service all of your needs. Should you have any further questions, please visit our website at www.bonhams.com/us for more information or call our Client Services Department at +1 (800) 223 2854 ext. 23550.

AUCTION ESTIMATES

The first step in the auction process is to determine the auction value of your property. Bonhams' world-renowned specialists will evaluate your special items at no charge and in complete confidence. You can obtain an auction estimate in many ways:

- Attend one of our Auction Appraisal Events held regularly at our galleries and in other major metropolitan areas. The updated schedule for Bonhams Auction Appraisal Events is available at www.bonhams.com/us.
- Call our Client Services Department to schedule a private appointment at one of our galleries. If you have a large collection, our specialists can travel, by appointment, to evaluate your property on site.
- Send clear photographs to us of each individual item, including item dimensions and other pertinent information with each picture. Photos should be sent to Bonhams' address in envelopes marked

as "photo auction estimate". Alternatively, you can submit your request using our online form at www.bonhams.com/us. Digital images may be attached to the form. Please limit your images to no more than five (5) per item.

CONSIGNING YOUR PROPERTY

After you receive an estimate, you may consign your property to us for sale in the next appropriate auction. Our staff assists you throughout the process, arranging transportation of your items to our galleries (at the consignor's expense), providing a detailed inventory of your consignment, and reporting the prices realized for each lot. We provide secure storage for your property in our warehouses and all items are insured throughout the auction process. You will receive payment for your property approximately 35 days after completion of sale.

Sales commissions vary with the potential auction value of the property and the particular auction in which the property is offered. Please call us for commission rates.

PROFESSIONAL APPRAISAL SERVICES

Bonhams' specialists conduct insurance and fair market value appraisals for private collectors, corporations, museums, fiduciaries and government entities on a daily basis. Insurance appraisals, used for insurance purposes, reflect the cost of replacing property in today's retail market. Fair market value appraisals are used for estate,

tax and family division purposes and reflect prices paid by a willing buyer to a willing seller.

When we conduct a private appraisal, our specialists will prepare a thorough inventory listing of all your appraised property by category. Valuations, complete descriptions and locations of items are included in the documentation.

Appraisal fees vary according to the nature of the collection, the amount of work involved, the travel distance, and whether the property is subsequently consigned for auction.

Our appraisers are available to help you anywhere and at any time. Please call our Client Services Department to schedule an appraisal.

ESTATE SERVICES

Since 1865, Bonhams has been serving the needs of fiduciaries – lawyers, trust officers, accountants and executors – in the disposition of large and small estates. Our services are specially designed to aid in the efficient appraisal and disposition of fine art, antiques, jewelry, and collectibles. We offer a full range of estate services, ranging from flexible financial terms to tailored accounting for heirs and their agents to world-class marketing and sales support.

For more information or to obtain a detailed Trust and Estates package, please visit our website at www.bonhams.com/us or contact our Client Services Department.

BUYER'S GUIDE

BIDDING & BUYING AT AUCTION

Whether you are an experienced bidder or an enthusiastic novice, auctions provide a stimulating atmosphere unlike any other. Bonhams previews and sales are free and open to the public. As you will find in these directions, bidding and buying at auction is easy and exciting. Should you have any further questions, please visit our website at www.bonhams.com or call our Client Services Department at +1 (800) 223 2854 ext. 23550.

Catalogs

Before each auction we publish illustrated catalogs that include dates and times for previews and auctions. Our catalogs also provide descriptions and estimated values for each "lot." A lot may refer to a single item or to a group of items auctioned together. We offer our catalogs by subscription or by single copy. For information on subscribing to our catalogs, you may refer to the subscription form in this catalog, call our Client Services Department, or visit our website at www.bonhams.com/us.

Previews

Auction previews are your chance to inspect each lot prior to the auction. We encourage you to look closely and examine each object on which you may want to bid so that you will know as much as possible about it. Items are sold "as is" and with all faults; illustrations in our catalogs, website and other materials are provided for identification only. At the previews, our staff is always available to answer your questions and guide you through the auction process. Condition reports may be available upon request.

Estimates

Bonhams catalogs include estimates for each lot, exclusive of buyer's premium and tax. The estimates are provided as an approximate guide to current market value and should not be interpreted as a representation or prediction of actual selling prices. They are determined well in advance of a sale and are subject to revision. Please contact us should you have any questions about value estimates.

Reserves

All lots in a catalog are subject to a reserve unless otherwise indicated. The reserve is the minimum price that the seller is willing to accept for a lot. This amount is confidential and does not exceed the low estimated value.

BIDDING AT AUCTION

At Bonhams, you can bid in many ways: in person, via absentee bid, over the phone, or via Bonhams' online bidding facility. Absentee bids can be submitted in person, online, via fax or via email.

A valid Bonhams client account is required to participate in bidding activity. You can obtain registration information online, at the reception desk or by calling our Client Services Department.

By bidding at auction, whether in person or by agent, by absentee bid, telephone, online or other means, the buyer or bidder agrees to be bound by the Conditions of Sale.

Lots are auctioned in consecutive numerical order as they appear in the catalog. Bidding normally begins below the low estimate. The auctioneer will accept bids from interested parties present in the saleroom, from telephone bidders, and from absentee bidders who have left written bids in advance of the sale. The auctioneer may also execute bids on behalf of the consignor up to the amount of the reserve, but never above it.

We assume no responsibility for failure to execute bids for any reason whatsoever.

In Person

If you are planning to bid at auction, you will need to register at the reception desk in order to receive a numbered bid card. To place a bid, hold up your card so that the auctioneer can clearly see it. Decide on the maximum amount that you wish to pay, exclusive of buyer's premium and tax, and continue bidding until your bid prevails or you reach your limit. If you are the successful bidder on a lot, the auctioneer will acknowledge your paddle number and bid amount.

Absentee Bids

As a service to those wishing to place bids, we may at our discretion accept bids without charge in advance of sale by telephone, by facsimile or in writing on bidding forms available from us. "Buy" bids will not be accepted; all bids must state the highest bid price the bidder is willing to pay. Our auction staff

will try to bid just as you would, with the goal of obtaining the item at the lowest bid price possible. In the event identical bids are submitted, the earliest bid submitted will take precedence. Absentee bids shall be executed in competition with other absentee bids, any applicable reserve, and bids from other auction participants. A friend or agent may place bids on your behalf, provided that we have received your written authorization prior to the sale. Absentee bid forms are available in our catalogs, online at www.bonhams.com/us, and at our San Francisco, Los Angeles and New York galleries.

By Telephone

Under special circumstances, we can arrange for you to bid by telephone. To arrange for a telephone bid, please contact our Client Services Department a minimum of 24 hours prior to the sale.

Online

Web users may place absentee bids online from anywhere in the world. To bid online, please visit our website at www.bonhams.com/us.

We are pleased to make our live online bidding facility available to bidders in this sale.

Additional terms and conditions of sale relating to online bidding will apply. Please see www.bonhams.com/ or contact the Client Services Department to obtain information and learn how you can register and bid online in this sale.

Bid Increments

Bonhams generally uses the following increment multiples as bidding progresses:

\$50-200	by \$10s
\$200-500	by \$20/50/80s
\$500-1,000	by \$50s
\$1,000-2,000	by \$100s
\$2,000-5,000	by \$200/500/800s
\$5,000-10,000	by \$500s
\$10,000-20,000	by \$1,000s
\$20,000-50,000	by \$2,000/5,000/8,000s
\$50,000-100,000	by \$5,000s
\$100,000-200,000	by \$10,000s
above \$200,000	at auctioneer's discretion

The auctioneer may split or reject any bid at any time at his or her discretion as outlined in the Conditions of Sale.

Currency Converter

Solely for the convenience of bidders, a currency converter may be provided at Bonhams sales. The rates quoted for conversion of other currencies to U.S. Dollars are indications only and should not be relied upon by a bidder, and neither Bonhams nor its agents shall be responsible for any errors or omissions in the operation or accuracy of the currency converter.

Buyer's Premium

A buyer's premium is added to the winning bid price of each individual lot purchased, at the rates set forth in the Conditions of Sale. The winning bid price plus the premium constitute the purchase price for the lot. Applicable sales taxes are computed based on this figure, and the total becomes your final purchase price.

Unless specifically illustrated and noted, fine art frames are not included in the estimate or purchase price. Bonhams accepts no liability for damage or loss to frames during storage or shipment.

All sales are final and subject to the Conditions of Sale found in our catalogs, on our website, and available at the reception desk.

Payment

All buyers are asked to pay and pick up by 3pm on the business day following the auction. Payment may be made to Bonhams by cash, checks drawn on a U.S. bank, money order, wire transfer, or by Visa, MasterCard, American Express or Discover credit or charge card or debit card. All items must be paid for within 5 business days of the sale. Please note that payment by personal or business check may result in property not being released until purchase funds clear our bank.

Sales Tax

California, Arizona, Colorado, Connecticut, Florida, Georgia, Illinois, Nevada, New York, Massachusetts, Pennsylvania, Texas, Washington DC and Washington state residents must pay applicable sales tax. Other state or local taxes (or compensating use taxes) may apply. Sales tax will be

automatically added to the invoice unless a valid resale number has been furnished or the property is shipped via common carrier to destinations outside the states listed above. If you wish to use your resale license please contact Cashiers for our form.

Shipping & Removal

Buyers are to review the Offsite Sold Property Storage page for a list of lots that will be removed to the offsite warehouse of Box Brothers. These designated lots must be retrieved by the buyer prior to the day and time designated on the Offsite Sold Property Storage page. If buyers of these designated lots also buy other lots, such as decorations, rugs or works of art, these lots may also be removed to the warehouse of Box Brothers, so all lots remain together and customers can collect or ship from one location. All other items will remain at Bonhams for a period of 21 days, after which time they may be transferred to offsite storage. [Wine, Jewelry, Natural History, Collectibles, 20th Century Decorative Arts, Rugs, Native American Art, Tribal Art and most Arms & Armor auctions are not included in this policy.](#)

Box Brothers San Leandro (for San Francisco auctions only)
1471 Doolittle Drive, San Leandro, CA 94577
Tel (800) 942 6822; Fax (510) 628 8454

Box Brothers Los Angeles (for Los Angeles auctions only)
220 W. Ivy Ave, Unit C, Inglewood, Ca 90302
+1 (310) 419 9915 or +1 (800) 474 7447

Box Brothers is open Monday-Friday 8am-5pm with Saturday and Sunday hours available. Buyers must contact Box Brothers 24 hours in advance of pickup. Appointments are required.

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ORDER OF SALE

Meteorites	1000-1021
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Paleontology	
Trilobites	1037-1041
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Crinoids.....	1094-1099
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Birds-Pterosaurs.....	1121-1126
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Minerals.....	1146-1171

REGULATED SPECIES MATERIALS AND CITES PERMITS

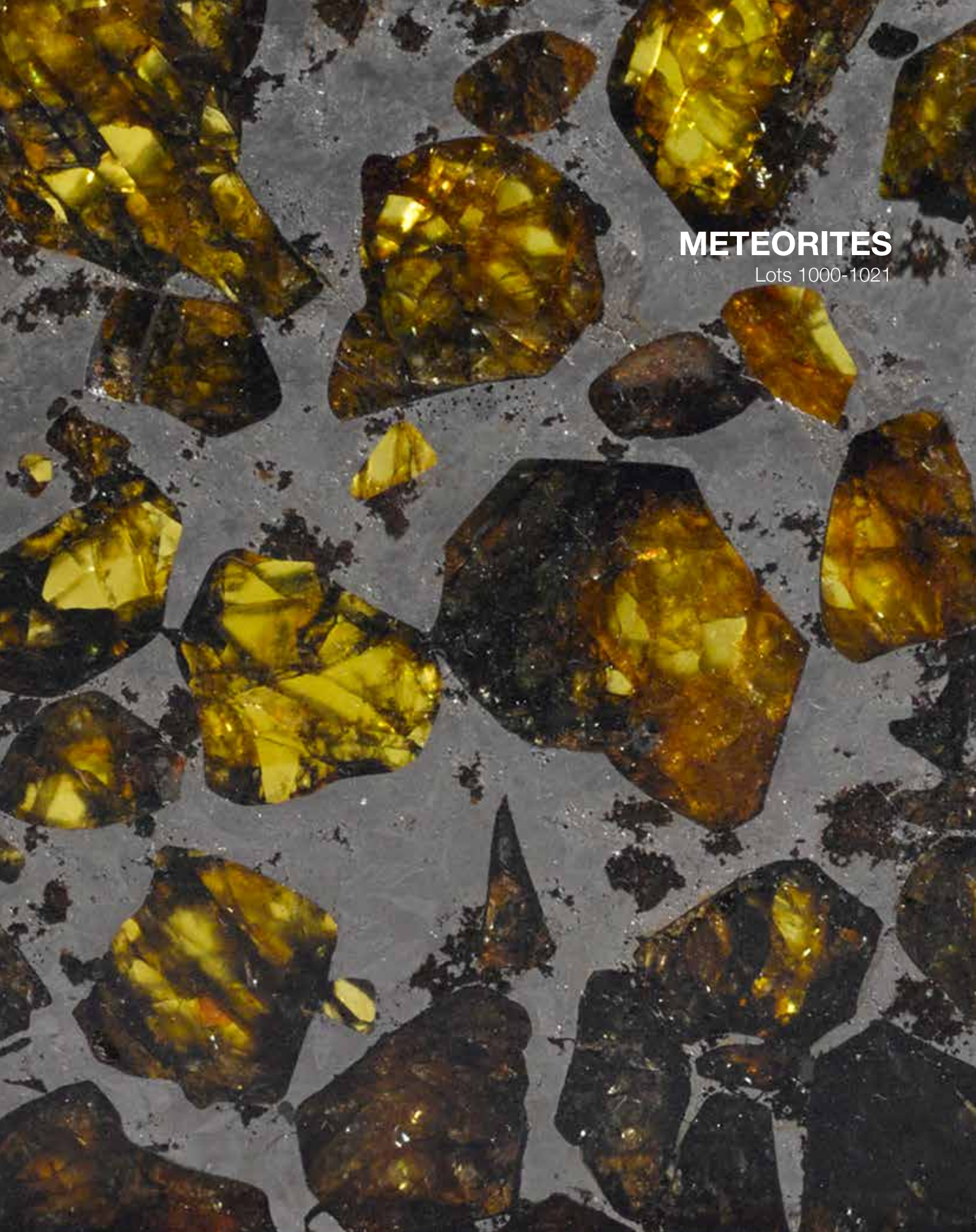
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ERA	PERIOD	EPOCH	MILLION YEARS AGO
CENOZOIC	QUATERNARY	Holocene (Recent)	Present to 0.01
		Pleistocene (Ice Age)	0.01 to 2
	TERTIARY	Pliocene	2 to 5
		Miocene	5 to 25
		Oligocene	25 to 38
		Eocene	38 to 55
		Paleocene	55 to 65
MESOZOIC <i>(Age of the Dinosaurs)</i>	CRETACEOUS		65 to 144
	JURASSIC		144 to 213
	TRIASSIC		213 to 248
PALEOZOIC	PERMIAN		248 to 286
	CARBONIFEROUS		286 to 360
	DEVONIAN		360 to 408
	SILURIAN		408 to 438
	ORDOVICIAN		438 to 505
	CAMBRIAN		505 to 590

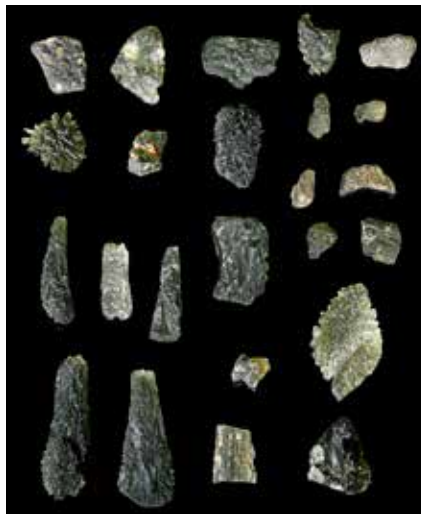


METEORITES

Lots 1000-1021



1000



1001



1002



1003



1004

1000

PAIR OF LARGE FULGURITES

Libyan Desert, Egypt

Formed when lightning with a temperature of at least 1,800 degrees Celsius instantaneously melts silica and fuses grains of sand together, fulgurite is produced in a period of approximately one second. The two present specimens are comparatively large and robust. *Length of each specimen: 8in*
\$2,000 - 2,500

1001

GROUP OF MOLDAVITE SPECIMENS

Czech Republic

Tektites are silicate glass formations. Today scientists agree the phenomenon occurs after large asteroids impact Earth. The heat and pressure resulting from such collisions liquefies terrestrial rocks, which are splashed into the atmosphere before returning to Earth as solidified glass. Arguably the most beautiful of all tektites, Moldavite is found in the Moldau River Valley in the Czech Republic and was formed nearly 15 million years ago by the impact that created the 14.5 mile diameter Nördlinger-Ries crater near Stuttgart. Revered as a talisman by Prized for its clarity, shape and color, crenellations abound in this superior group of specimens. *Largest measures 2.5 in*
\$1,500 - 2,000

1002

FINE MOLDAVITE PENDANT

Nördlingen Ries, Germany

Formed approximately 14.7 million years ago by a large meteorite impact in present day Nördlingen Ries, Germany, moldavite is an olive-green vitreous glass-like tektite. The Earth's surface at the sight of the impact was vaporized by the intense temperatures, then cooled and condensed to form the lovely translucent green material. The present gem quality specimen, set in a silver bezel, displays the typical wavy surface, small *craters* and indentations. Large gem quality specimens of moldavite are very difficult to locate and are in great demand. In the Czech Republic, pieces of moldavite were traditionally given from grooms to their brides on their wedding day. *Measures 66 x 31 x 6 millimeters; Weighs 92.5 carats including bezel*
\$2,000 - 2,500

To be sold without reserve

1003

FINE SEYMCHAN METEORITE SLICE

Seymchan

*Stony-iron, Coarse Octahedrite, IIE Pallasite
Magadan, Russia*

Seymchan was originally found in the far-eastern region of Russia in the summer, 1967, by a geological survey party near the Hekandue River, in the Magadan District of Russia. The presence of Olivine crystals in Seymchan evidences its origin near the core/mantle boundary of a differentiated body (thought to be an asteroid – a small, rocky body that orbits the sun) which was destroyed during the formation of our solar system, approximately 5.5 to 6 billion years ago.

Plentiful olivine crystals can be seen within the polished nickel-iron matrix of this specimen. *Measures approximately 4 1/2 x 6 1/2 inches; weighs 310 grams*

\$2,200 - 2,800

1004

FUKANG METEORITE – EXCELLENT POLISHED AND ETCHED PALLASITE SECTION

Iron-nickel Pallasite

Fukang, China

Known as literal gemstones from outer space, the olivine (peridot) crystals from the Fukang meteorite are the largest found in any of the known pallasites. Fukang's breathtaking translucent yellow-green crystals are highly prized, particularly because pallasites as a group are very rare. The present polished section displays some of the coveted translucent gems, as well as an etched section showing the Widmanstatten patterns of iron-nickel matrix. Offered in a 6x5-inch Riker mount. *Measures 3.75 x 3.25in; Weighs 83.3 grams*

\$3,500 - 5,000

1005

UNUSUAL SEYMCHAN METEORITE SLICE

Pallasite/Mesosiderite

Magadan District, Eastern Russia

Found in 1967 in Seymchan, in Far Eastern Russia, Seymchan was originally believed to be an iron-nickel meteorite but recently olivine crystals were found in parts of some of the Seymchan meteorites, making it a far rarer pallasite. Pallasites are literally gemstones from outer space containing olivine crystals within the iron-nickel matrix. The present large slice exhibits over 50% olivine crystals and silicate inclusions in its iron-nickel matrix and has been polished to reveal this interesting interior, which includes numerous translucent olivine crystals. Silicate inclusions are found in a type of stony-iron meteorite known as a mesosiderite. This unique Seymchan specimen is a mix between a pallasite and a mesosiderite. The olivine crystals in Seymchan are smaller in diameter than in most pallasites. Seymchan slices are remarkably stable. Offered in an 8 x 6-inch Riker mount. *Measures 4.5 x 4.1in; Weighs 170.2 grams*

\$3,500 - 4,500

1006

LARGE STONY METEORITE WITH FUSION CRUST- COMPLETE SPECIMEN, WITH STAND

Unclassified Northwest Africa

Sahara Desert, Morocco

Most stony meteorites are small because they typically explode or break apart in Earth's atmosphere. This large specimen is one of the few exceptions. Discovered by Berbers in the Sahara Desert of Morocco, it is designated as an unclassified NWA specimen as it has not yet been scientifically classified. It probably is an *ordinary chondrite*, which means that it consists of round silicate grains that formed at the very beginning of the solar system

4.55 billion years ago. All stony meteorites contain iron, are designated as either low or high iron and are quite heavy for their size. This meteorite is completely original, with nearly complete dark brown fusion crust on the bottom side which was buried in sand. The fusion crust on the top portion of the meteorite, which was exposed to the elements, exhibits slight weathering. *Offered on a Lucite stand. Measures 5 x 3 1/4 x 2in; Weighs 3 1/4 pounds*

\$2,000 - 2,750

1007

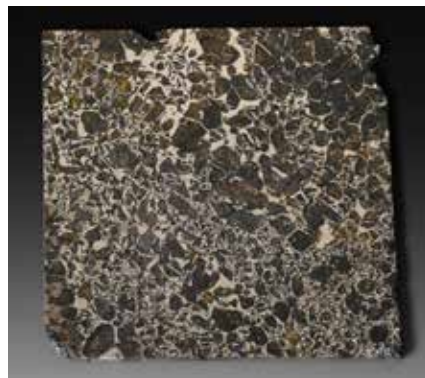
COMPLETE SPECIMEN WITH FUSION CRUST FROM THE BIGGEST METEOR STRIKE SINCE 1907

Stony Chondrite LL5 SR4

Chelyabinsk, Russia

The largest meteor strike since 1907 occurred at 9:20 a.m. on the morning of February 15, 2013 when an eight-to-ten-ton, fifty-foot-long meteor exploded 10-15 miles above the ancient city of Chelyabinsk, Russia. More than 95% of the recovered meteorites are extremely small, less than 3 grams in weight. The present complete specimen is much larger than the vast majority of Chelyabinsk meteorites. It exhibits a fresh black fusion crust covering more than 75% of the surface, with the bottom side offering a window into the interior, which displays a light gray matrix mixed with specks of iron and rust-orange chondrules. Offered in an 8 x 6-inch Riker mount and a photo of the explosion. *Measures 31 x 28 millimeters; Weighs 24.4 grams*

\$2,000 - 3,800



1005



1006



1007



1008

1008

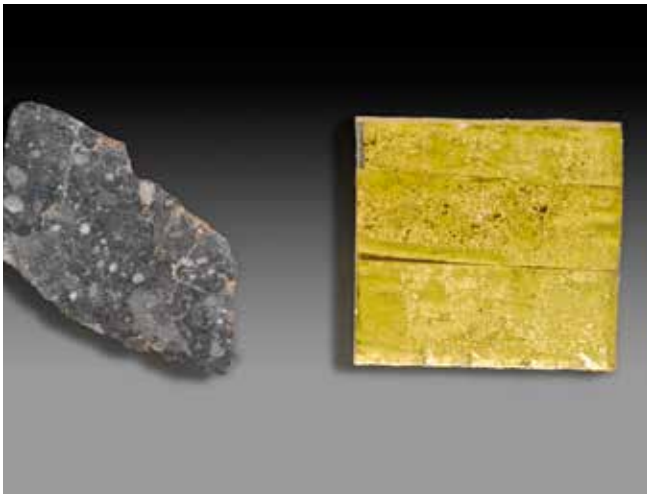
VERY LARGE AFRICAN METEORITE WITH POLISHED FACE

Unclassified NWA - Stony Chondrite

Sahara Desert, Morocco

Most stony meteorites are small (less than one pound) because stony meteorites usually break apart or explode before they reach Earth. This nearly complete specimen is one of the exceptions. It is designated as an unclassified NWA (North West Africa) stony meteorite and was found by nomadic Berbers in the sands of the Sahara Desert of Morocco. Classified as an ordinary chondrite, it consists of round silicate grains that formed at the very beginning of the solar system 4.55 billion years ago from molten globs of accretion which formed the asteroid from which this meteorite was blasted off when two asteroids collided. Displaying more than 50% of its original fusion crust, the present specimen is dark brown in color, boasting a polished end revealing some medium and dark brown irregularly shaped chondrules. Stony meteorites of this size are rarely seen on the market today. *Measures 7 x 7 x 3in; Weigh 13 1/2 lbs*

\$3,500 - 4,500



1009

1009

LUNAR METEORITE SECTION, TOGETHER WITH HISTORIC APOLLO 11 KAPTON FOIL

Northeast Africa 001 Lunar, Anorthositic Regolith Breccia

Representing the very first meteorite to be authenticated from Northeastern Africa, this lunar meteorite was discovered in April of 2002 in northern Sudan near the Libya/Egypt/Sudan border. Only 262 grams total (just over 1/2 pound) were recovered. *Northeast Africa 001* is an anorthositic regolith breccia from the lunar highlands that was blown off of the moon by a meteorite impact. The polished section of this fascinating specimen displays a number of white and light gray mineral clasts embedded in a dark gray microcrystalline impact melt matrix.

Included in this lot, in a 12 x 8-inch Riker mount and protective acrylic, is a 1-inch square specimen of Kapton foil which came from the Apollo 11 Command Module, Columbia, after its splashdown in the Pacific Ocean from its historic first lunar landing. This Kapton foil provided thermal protection for the Command Module as it passed through the atmosphere on the return flight from the moon. The foil is composed of gold on one side and silver on the other and has been mounted in acrylic for protection. Meteorite section weighs 2,002 grams; Kapton foil specimen measures 1 x 1in *Included with this lot are an authentication card for the lunar meteorite and a signed certificate for the Kapton foil documenting that it was given to retired NASA engineer W.R. Whipple, in Production Control, in 1969. Also included is a color photograph of the Apollo 11 Command Module showing the gold Kapton foil covering its outer surface.*

\$5,000 - 8,000



1010

1010

MARTIAN METEORITE INSPIRING SCIENTIFIC THEORIES OF LIFE ON MARS

Martian Tissint Village, Morocco

Because the Tissint meteorite was recovered within weeks of its fall in an arid environment, it has offered tremendous research potential. In April of 2012, a team of scientists at the Buckingham Center for Astrobiology and Cardiff University discovered what may be signs of fossilized life in the meteorite. Scientists are currently making efforts to confirm that these structures indicate the presence of life on Mars 500-400 million years ago. A rare observed fall on July 18, 2011 in Morocco manifested as an intense fireball, which was at first yellow in color, then turned to green before breaking into several pieces resulting in two sonic booms.. It was identified as Martian by the analysis of its oxygen isotopes. The composition of oxygen isotopes from Mars is different from those on Earth and is diagnostic of Martian meteorites.

The host rock, solidified from Martian magma 500-400 million years ago, was blasted off the surface of Mars by an asteroid impact approximately one million years ago. The glossy black fusion crust looks like glass, due to its freshness, and the interior is a pale gray color with some pale yellow olivine macrocrysts.

The present museum quality specimen displays more than 40% pristine glassy black fusion crust and a view inside the meteorite from exposed areas. Offered in a Riker mount with a picture of an organic globule discovered in England. *Measures 14 x 13 x 8 millimeters.*

Weighs 3.43 grams

\$6,000 - 8,000



1011

1011

INCOMPARABLE, RECENTLY DISCOVERED LUNAR METEORITE

Northwest Africa 8687

Lunar Granulitic, Troctolitic Breccia

Morocco

The components of this Lunar meteorite specimen tell the story of its fiery genesis deep within the Moon to its violent impact history on the surface. Devastating forces were required to release it from the Moon's gravitational influence, propel it for an untold length of time in frozen space on a trajectory toward Earth and produce its supersonic deceleration as it flamed through Earth's atmosphere. It is uncertain how much time passed for the desert sands to have sandblasted the fusion crust away. While this is not always a desired phenomenon, it represents an advantage in this particular meteorite, as one is able to view its structure without cutting it. From such violence, beauty has emerged in the gray-green matrix contrasted by dark, thin webs of highly shocked impact material, which criss-cross throughout.

Discovered in 2013 by desert nomads in Morocco, the present specimen is classified as a granulitic, troctolitic breccia: A troctolite is an accumulation of crystals, which form as magma is slowly pushed up to the surface; granulitic means that its texture has been partly recrystallized by impact heating; a breccia is a rock composed of broken fragments cemented together by pressure or impact. Study of Lunar meteorites such as Northwest Africa 8687 help us gain a clearer understanding our closest cosmic companion. *Weighs 93.9 grams.*

Measures 2 x 1 3/4 x 1 1/2 in

\$20,000 - 25,000



1011 (reverse)



1012

1012
URUGUAYAN METEORITE

Baygorria
Nickel-Iron
Rio Negro Province, Uruguay
An aesthetically shaped Uruguayan meteorite discovered July 8, 1994. Original label from Hollow Mountain Industries. *Weights 3lbs 2oz.; Measures 5 1/2 x 2 1/2 x 2 1/4in*
\$1,500 - 2,000
To be sold without reserve



1013

1013
LARGE NICKEL-IRON ETCHED METEORITE

Campo del Cielo
Iron -Nickel, Coarse Octahedrite
Gran Chaco, Argentina
The famous iron-nickel meteorite, *Campo del Cielo*, fell to Earth over 4000 years ago in a mountainous region of Gran Chaco, Argentina, 500 miles north-northwest of Buenos Aires. The present complete slice, weighing 4.8 pounds, displays a beautifully dimensional etch that shows the coarse octahedrite pattern of this Type 1A iron- nickel meteorite. *Weights 2.2 kg. Measures 4 1/2 x 7 1/2 x 3/4in*
\$800 - 1,000



1014

1014
SWEDISH MUONIONALUSTA METEORITE CUBE

Iron, Fine (IVA) Octahedrite
Kiruna, Norrbotten, Sweden
A cube cut meticulously from a meteorite to display the fine octahedrite Widmanstätten pattern, an extraterrestrial metallic grid in shimmering shades of silver and gray comprising of two forms of extraterrestrial nickel-iron, kamacite and taenite. An interesting troilite inclusion is centered on one of the cube's surfaces. A fine objet d'art for any collection. *Weighting approximately 3.5 kilos. Measures 3 1/8 x 3 1/8 x 3 1/8 in*
\$8,000 - 10,000



1015

1015
RARE RUSSIAN ATAXITE METEORITE-END PIECE

Ungrouped Iron-nickel Dronino, Russia
Ataxites are known as ungrouped irons as they do not match the chemistry of any of the other iron-nickel groups and most certainly come from a different planetary body than the other irons. Dronino is an ataxite that was found by a Russian mushroom hunter in July of 2002 near the Russian village of Dronino. The weathered and rusted crust has been removed from the present specimen, leaving the solid iron- nickel core. The cut side has been polished and etched exhibiting sulfide and chromite inclusions. The natural uncut end displays a bright gun metal color with the ragged surface and small regmaglypts characteristic of the most desirable Dronino ataxite meteorites. *Measures 6 1/4 x 2 13/20 x 2in; Weights 1,383 grams*
\$2,000 - 3,000

1016
MUONIONALUSTA METEORITE - THE BOOMERANG

Iron-nickel, Fine (IVA) Octahedrite, Kiruna, Norrbotten, Sweden
This exceptional boomerang-shaped meteorite slice is cut from the largest know Muonionalusta meteorite found to date, weighing over one ton. The Muonionalusta iron-nickel metal is known to be some of the hardest meteorite and is quite difficult to cut, especially with larger sizes such as this slice. The Muonionalusta is also the first meteorite in which Stishovite has been identified, a rare and extremely hard silicon dioxide polymorph of quartz, formed by very high shock pressure created by the hypervelocity of a meteorite impact, giving rise to the theory that the Muonionalusta impact was one of the most violent and direct impacts on this planet. Offered is a slice of Muonionalusta with the classic Widmanstätten patterns of meteorite metal matrix, an unearthly grid of shimmering shades of grey and silver, comprising two forms of nickel-iron, kamacite, and taenite. Rarity and difficulty to recover make these specimens uncommon on the market. Custom mounted. *Measures 30 x 15in*
\$15,000 - 18,000

Offered at a custom-made steel stand





1017

1017
COLLECTION OF THREE CANYON DIABLO METEORITES

Iron-Coarse Octahedrite
Coconino County, Arizona

The Canyon Diablo meteorite impacted at Barringer Crater, Arizona and was named after nearby Canyon Diablo (meaning Devil's Canyon), which lies 3 - 4 miles west of the crater. Until 1953, Barringer Crater was the center of a long dispute over the origin of craters that showed no evidence of volcanism. The debate was settled, thanks to a study by Eugene Shoemaker. To produce a crater of 4,000 feet wide and 570 feet deep it is hypothesized that the meteorite would have weighed approximately 63,000 tons and would have measured 100 feet in diameter. Most of the mass would have been vaporized on impact and the rest was blasted into smaller pieces. Canyon Diablo has now been closed for many years to meteorite hunters. Specimens from this locality are scarce. The present collection of three Canyon Diablo meteorites are characterized by a heavy patina which is evidence of weathering. *Weighing 2.7kg and 976 grams and 466 grams respectively.* (3)

\$1,500 - 2,000



1018

1018
SIKHOTE-ALIN METEORITE

Iron 11AB, Coarsest Octahedrite
Maritime Territory, Russia

This splendid meteorite originates from the largest meteorite shower since the dawn of civilization, which occurred on February 12, 1947 over Siberia's Sikhote-Alin Mountains. The monumental forces exerted on this meteorite as it rocketed through the atmosphere are amply evident. Patches of fusion crust (from frictional heating with the atmosphere) are seen and the meteorite is blanketed in regmaglypts (the aerodynamic thumbprints sculpted during the meteorite's atmospheric plunge). Here is a covetable specimen from one of the most dramatic witnessed falls of all time. Weighs approximately 413.6 grams; *Measures 3 1/2 x 2 1/4 x 1 1/4in*

\$1,200 - 1,500



1019

1019
LARGE CANYON DIABLO METEORITE

Iron-nickel
Meteor Crater, Winslow, Arizona

From a private collection, this large *Canyon Diablo* specimen represents one of the more sought-after meteorites by collectors. Any sizeable specimens are now difficult to find as the area around Meteor Crater near Winslow, Arizona has been closed for years. Most currently available *Canyon Diablo* meteorites are a mere 100-200 grams in weight. Meteor Crater, which measures nearly one mile in diameter, was created over 50,000 years ago when a meteor, measuring approximately fifty feet in diameter, exploded high over the Arizona desert. Characteristic of specimens from the fascinating site, the present specimen displays an attractive gunmetal color and a pleasing shape. Also seen are several large, distinctive regmaglypts (*thumbprints*), formed as the meteorite became molten in Earth's atmosphere. *Measures 5 3/4 x 5 x 4in; Weighs over 12 lbs*

\$5,500 - 7,500



1020

1020
MUONIONALUSTA METEORITE END PIECE

Iron, Fine (IVA) Octahedrite
Kiruna, Norrbotten, Sweden

Dated to have impacted northern Sweden approximately one million years ago, and initially discovered in 1906, this locality has become one of the best sites for fine octahedrite irons. Searches for the impact crater from the original shower, near the Arctic Circle have been in vain, as several glacial periods have most likely transported the meteorites away from the original strewn field.

These meteorites are almost always found buried under several feet of glacial moraine, and require specialized metal detectors to be found at these depths. The Muonionalusta is also the first meteorite in which Stishovite has been identified, a rare and extremely hard silicon dioxide polymorph of quartz, formed by very high shock pressure created by the hypervelocity of a meteorite impact, giving rise to the theory that the Muonionalusta impact was one of the most violent and direct impacts on this planet.

Offered is a endpiece of Muonionalusta is the classic Widmanstätten patterns of meteorite metal matrix, an unearthly grid of shimmering shades of grey and silver, comprising two forms of nickel-iron, kamacite, and taenite. The high nickel content galvanizes the iron to some extent, which aids immensely in the meteorite's survival for nearly a million years under conditions highly favorable to rusting. Rarity and difficulty to recover make these specimens uncommon on the market.

Measures 5.5 x 4.5 x 5in

\$9,000 - 12,000

1021
GIBEON METEORITE

Iron, Fine Octahedrite
Nambia, Africa

No meteorite collection would be complete without at least one specimen from the famous Gibeon fall. Having fallen in prehistoric times and later discovered by the Nama people, Gibeon has been used by the indigenous Africans to make tools and weapons. The Gibeon strewnfield is composed of an elliptical area measuring 275 x 100 kilometers. *Measures 16 x 12.5 x 7.25in; Weighs 83.2 kilograms (183 pounds)*

\$18,000 - 22,000



1021



1021 (reverse)



1022

1022

SHOULDER MOUNT AMERICAN BISON

Bison bison

North America

A superb shoulder mount American Bison.

Measures 33 x 36 x 42in

\$2,500 - 3,500

To be sold without reserve



1023

1023

WARTHOG SKULL AND TAXIDERMY COYOTE

Phacochoerus africanus

Sub-Saharan Africa

Canis latrans

North America

The Common Warthog gets its name from the four large wart-like tusks on its head, which serve as a defense. Males occasionally kill each other when competing for females.

Offered with a beautifully lifelike taxidermy coyote.

Length of coyote measures 52in;

Warthog skull measures 16 x 12 1/4in (2)

\$2,000 - 2,500

1024

TAXIDERMY BEAVER

Castor canadensis

Montana

An extremely large beaver, measuring approximately forty inches, tail to nose, is offered in a classic taxidermy pose. Offered on wood stand with Plexiglas cover. *Measures 48in*

\$2,000 - 2,500

To be sold without reserve

1025

TWO GROUPS OF TAXIDERMY TURTLES AND FROGS

Manouria impressa, Geochelone sulcata,

Lithobates catesbeianus

A group of taxidermy frogs, ranging in size from 5-7 inches, arranged as a festive band are offered along with three taxidermy turtles.

Measuring 16, 12 and 6 1/2in respectively

\$2,000 - 2,500

To be sold without reserve



1023

1026

TWO TAXIDERMY SNAKES

Lampropeltis Triangulum campbelli

North America

A pair of Campbell's milk snakes are taxidermy mounted in a courting pose on a branch offered along with a taxidermy cobra.

Measures 24 x 13in

\$2,000 - 2,500

To be sold without reserve

1027

TAXIDERMY PYTHON SWALLOWING A MONKEY

Reticulated Python

Ateles fusciceps

A dramatic taxidermy mount captures a large snake in the act of swallowing a Black Headed Spider Monkey. *Measures 20 x 50in*

\$2,500 - 3,500

To be sold without reserve



1024



1025



1026



1027



1028



1028

1028

TAXIDERMY SKUNK, RACCOON, AND AN ALIGATOR SKIN

A taxidermy skunk and a taxidermy raccoon, together with an alligator skin. (3)

\$1,000 - 1,200

To be sold without reserve

1029

GROUP OF FOUR TAXIDERMY LIZARDS

Varanus salvator, Anolis carolinensis, Chamaeleo chamaeleon
World localities

Four taxidermy lizards including an impressive four-foot monitor lizard. (4)

Largest measures 48in

\$2,000 - 2,500

To be sold without reserve

1030

ELK ANTLER CHANDELIER

An impressive chandelier composed of elk antlers. An requisite decorative piece for mountain décor. *Measures 62 x 31 x 16 in*

\$2,000 - 2,500

To be sold without reserve

1031

PAIR OF BLACK MARLIN BILLS AND TAXIDERMY FISH

Istiompax indica
Pacific Ocean

Two statuesque black marlin bills, together with a taxidermy fish. Offered on wooden bases. (3) *Measures 20 3/4 and 24 3/4in*

\$2,000 - 2,500

To be sold without reserve

1032

LARGE FRAMED GROUP OF MODERN INSECTS

Macrodontia cervicornis, Eupatorus Gracilicornis Helicopriss Dominos, Tosena fasciata, D. granulosa, Elasteridae sp., B. numitor ferruginea, Hoplocerembyx spinicornis, D. walker, Macrotoma fisheri, Trigonophorus foveiceps, Lepidota stigma, Icericeus, N. parryi, Argema mitrei, Orthetrum testaceum testaceum, Mnais andersini andersoni, andersoni, Rhacophorus reinwardtii, Scolopendra sp. Worldwide Localities

A group of insects and butterflies including a horseshoe bat, a flying lizard and a flying frog, offered in fifteen frames, provides a fascinating and decorative wall exhibit.

Largest measures 20 x 14in

\$2,000 - 3,000

To be sold without reserve



1029



1030



1031



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1032



1032



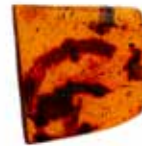
1033



1033



1034



1036

1033

PAIR OF FOSSIL FECES SPECIMENS

Indeterminate Species

Eocene

Green River Formation, Wyoming

A large fossil coprolite specimen in limestone from an Eocene crocodile is offered with a 17-inch coprolite specimen from Montana mounted on a decorative mirror backed frame. *Matrix measures 8 1/2 x 11in; Frame measures 23 1/3 x 14in (2)*

\$2,000 - 2,500

To be sold without reserve

1034

IMMENSE NATURAL BLISTER PEARL ON ABALONE SHELL

Haliotis fulgens

Ensenada, Baja, Mexico

An astoundingly large blister pearl, measuring five inches in length, exhibits enchanting pink, green and purple iridescent colors within the large abalone shell in which it was discovered. Collected in 1970 by a diver in 20-30 feet of water off of Ensenada Baja, Mexico, the amazing specimen certainly would have taken a good number of years to form. A pearl is formed when a foreign substance is lodged within the soft tissue of a shelled mollusk. The soft mantle within the shell secretes nacre in order to cover the substance causing the irritation. The pearl grows in size as more and more nacre is secreted over time. *Length of pearl measures 5in; Shell measures 8in*

\$2,250 - 3,000

1035

NO LOT

1036

COLLECTION OF SIX AMBER SPECIMENS WITH UNUSUAL INSECTS

Isopod, Pseudoscorpion and Midge with eggs, Millipede, Queen Ant, Centipede, Moth with a group of eggs

Miocene

Dominican Republic

Prized for its high quality and transparency, Dominican amber was formed from the fossilized resin of an extinct species of tree, *Hymenaea protera*. The fascinating insects preserved within this amber are over 25 million years old and are found in the mountainous region north of Santiago. The present collection of amber nuggets contains a number of interesting insects. *Each nugget measures between 1/2 - 1in (6)*

\$2,000 - 2,750

To be sold without reserve

PALEONTOLOGY

Lots 1037-1145





1037

1037
**RARE TRIPLE CERAURUS
 TRILOBITE PLATE**

Ceraurus pleuraxanthemus
 Late Ordovician
 Walcott-Rust Quarry, Trenton Falls, New York
 Aesthetically pleasing multiple specimens such as this are very rare. The amazing multiple trilobite plate displays three 455-million-year-old pristine, complete trilobites, beautifully positioned, making for an outstanding display specimen. Exposing them through microscopic preparation with high-tech micro-sandblasters and scribes required over thirty hours of painstaking work. The Walcott-Rust quarry is the richest trilobite site in New York. It was discovered by world-famous paleontologist, Charles Doolittle Walcott, in 1870. *Matrix measures 7 5/8 x 6 5/8in; Length of specimens measure 1 1/2in, 1 5/16in and 1in, respectively*
\$4,000 - 5,000



1038

1038
EXCEPTIONAL AMERICAN TRILOBITE

Arctinurus boltoni
 Middle Silurian
 Rochester Shale Formation, Middleport, New York
 One of the most famous trilobites in the world, *Arctinurus* is widely considered among the most desirable trilobites in the Western Hemisphere. Originally described by James Hall in his famous 19th Century tome, it is found at only one location in the world, the Rochester Shale Formation near Buffalo, New York. It is characterized by a unique *bat wing* appearance to its posterior segments and a very ornate, *stealth-bomber*-shaped head (cephalon) with raised, multi-faceted eyes, and a gorgeous pustulose surface texture, giving it an appearance quite unlike any other trilobite genus in the world. Exceptionally aesthetic, *Arctinurus* demonstrates dramatically the beauty of nature's designs, and of form following function.

The quarry is now closed, therefore the rarity of *Arctinurus* on the market can only increase in the future. The present specimen exhibits exceptional preservation and detail and is highly three-dimensional, giving it the appearance of a fine bas-relief sculpture. A partial specimen of a second individual is visible beneath. *Specimen measures 4 5/16 x 3 3/8in*
\$3,000 - 4,500



1039

1039
LARGE MOROCCAN TRILOBITE

Dikelocephalina
 Ordovician
 Morocco
 Impressively large, this Moroccan trilobite species is a nice addition for any trilobite collection. The chestnut-colored specimen is beautifully preserved. *Measures 10 3/4 x 9 3/4in*
\$2,000 - 3,000
To be sold without reserve

1040
**GROUP OF FOUR TRILOBITES FROM
 TWO WORLD LOCALITIES**

Asaphus kowalewskii, Hoploichasplautini
 Middle Ordovician
 St. Petersburg Region, Russia
Dicrinurus monstrosus, Erbenochile
 Devonian, Morocco
 Two well-preserved trilobites from the Ordovician of Russia in matrix measuring 8 x 7 1/2 inches, and two trilobites from the Devonian of Morocco. *Measures 2 x 2 1/2in*
\$3,000 - 4,000
To be sold without reserve

1041
MASSIVE TRILOBITE PLAQUE

Acadoparadoxides,
 Cambrian,
 Tikniouine, Anti-Atlas Morocco
 This rare, massive plate, featuring over fifteen large, complete and partial, *Acadoparadoxides* trilobites, represents one of the finest totally natural assemblages ever to emerge from North Africa. A cataclysmic event was responsible for the sudden death and burial of this mass of creatures. Every specimen is natural and unrestored. *Matrix measures 86 x 45 x 2in, Largest Trilobite measures 13 1/2in*
\$12,000 - 15,000

1042
LARGE FOSSILIZED SHELL

Campanile giganteum
 Eocene,
 Champagne, France
 Related to the bell clapper of Australia, this ancient gastropod specimen dwarfs its extant cousin, which only reaches eight inches in length. Aesthetically pleasing and highly decorative, fossilized shells are coveted by collectors. Also seen with this large, well-preserved example are two smaller fossil shells and shell fragments. *Measures 16 x 10in*
\$2,000 - 2,500
To be sold without reserve

1043 **NO LOT**

1044
**GROUP OF AMMONITES FROM RUSSIA
 AND MADAGASCAR**

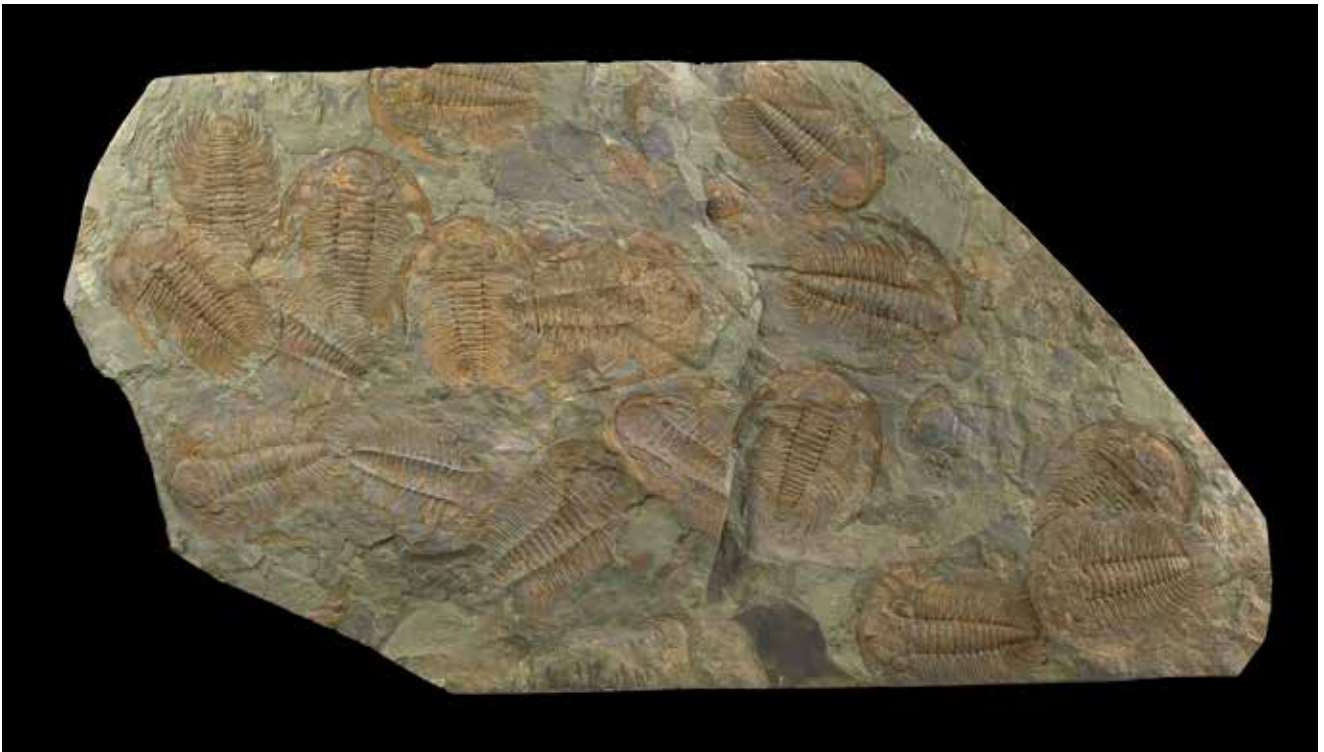
Speetoniceras sp., Speetoniceras versicolor
 Cretaceous
 Volga, Russia
 Cretaceous
 Madagascar
 A sliced pair of ammonites from Madagascar measuring 8 x 6 1/2 inches with three pyritized ammonites from Russia offered as a collection. Golden pyrite is seen in the specimens and is particularly evident in one ammonite displaying well-defined, crystal-filled growth chambers. *Measures 6in x 6 1/2 in. and 5 x 5in respectively.*
\$2,000 - 2,500
To be sold without reserve



1040



1040



1041



1042



1044



1044



1045

1045
UNIQUE HORNED RUSSIAN AMMONITE

Sschloenbahia varians

Early Cretaceous

Mangishlak, Kazakhstan

A superb *Sschloenbahia* ammonite from the Cretaceous Period displays several horns and ridges per chamber. A unique collector's piece. Offered on a custom stand. Height 30in. Diameter 21in

\$3,500 - 4,500



1046

1046
VERY LARGE HORNED AMMONITE

Kranosphinctes sp.

Late Jurassic

Tulear Morondava River Basin, Atsimo-Andrefana Region of Tular, Madagascar

A fine, majestically sized horned ammonite from the Jurassic Age.

Offered on a custom bronzed base. Height 29 1/2 in. Width 21 in. On an 18" diameter base

\$5,000 - 6,000



1047

1047

AMMONITE MASS MORTALITY PLATE

Lytoceras sp., Pachydiscus sp., Cleoniceras sp.

Late Jurassic

Tulear Morondava River Basin, Atsimo-Andrefana Region of Tular, Madagascar

A fascinating variety of sea life from the Late Jurassic. The great number of specimens indicates that a catastrophic event, such as an earthquake or underwater landslide, caused the mass death of countless individuals 161-156 million years ago. Offered on a custom bronzed pedestal. *Height approximately 40 1/2 in*

\$5,000 - 8,000



1048

1048

LARGE JURASSIC AMMONITE

Lytoceras sp.

Late Jurassic

Tulear Morondava River Basin, Atsimo-Andrefana Region of Southwestern Madagascar

An exceptionally large, polished ammonite from the Jurassic Period, cut to expose the intricate suture pattern found in the inner shell.

Offered on a custom bronzed base. *Height measures 31 x 24 in*

\$6,000 - 8,000



1049

1049

AMMONITE ON MATRIX STAND

Sphenodiscus sp.

Cretaceous

South Dakota

Offered is a large polished Cretaceous ammonite in original matrix. The matrix has been shaped to provide a natural base for the ammonite encased in the rock. *Diameter of ammonite measures 14in. Matrix measures 20 x 17in*

\$2,000 - 3,000



1050

1050

TWO LARGE HETEROMORPHIC AMMONITES

Cretaceous

Ancyloceras sp. (larger), Emeriticeras sp. (smaller)

Atlas Mountains, Morocco

Heteromorphic ammonites, displaying irregular coils, appeared during the Cretaceous. In the present interesting specimen, two heteromorphic ammonites are attached to each other by matrix. These thin-shelled heteromorphic ammonites were very poor swimmers and probably crawled on the sea bottom looking for prey at depths exceeding 100 feet. *Larger specimen measures 18in; Smaller specimen measures 10 1/2in*

\$2,000 - 3,000



1051

1051

IRIDESCENT AMMONITE

Placenticerias meeki

Upper Cretaceous Bearpaw Shale

Mcgrath, Alberta, Canada

An exceptional, large ammonite displays a brilliant red sheen, with some yellows and greens, produced by light interference by the layers of fossilized nacre. Collected in the spring of 1997. Accompanied by Certificate signed by *Rene Vandervelde* of Canada Fossils.

Measures 10 1/2in

\$5,000 - 6,000

To be sold without reserve

1052

STUNNING IRIDESCENT AMMONITE IN MATRIX, FREESTANDING

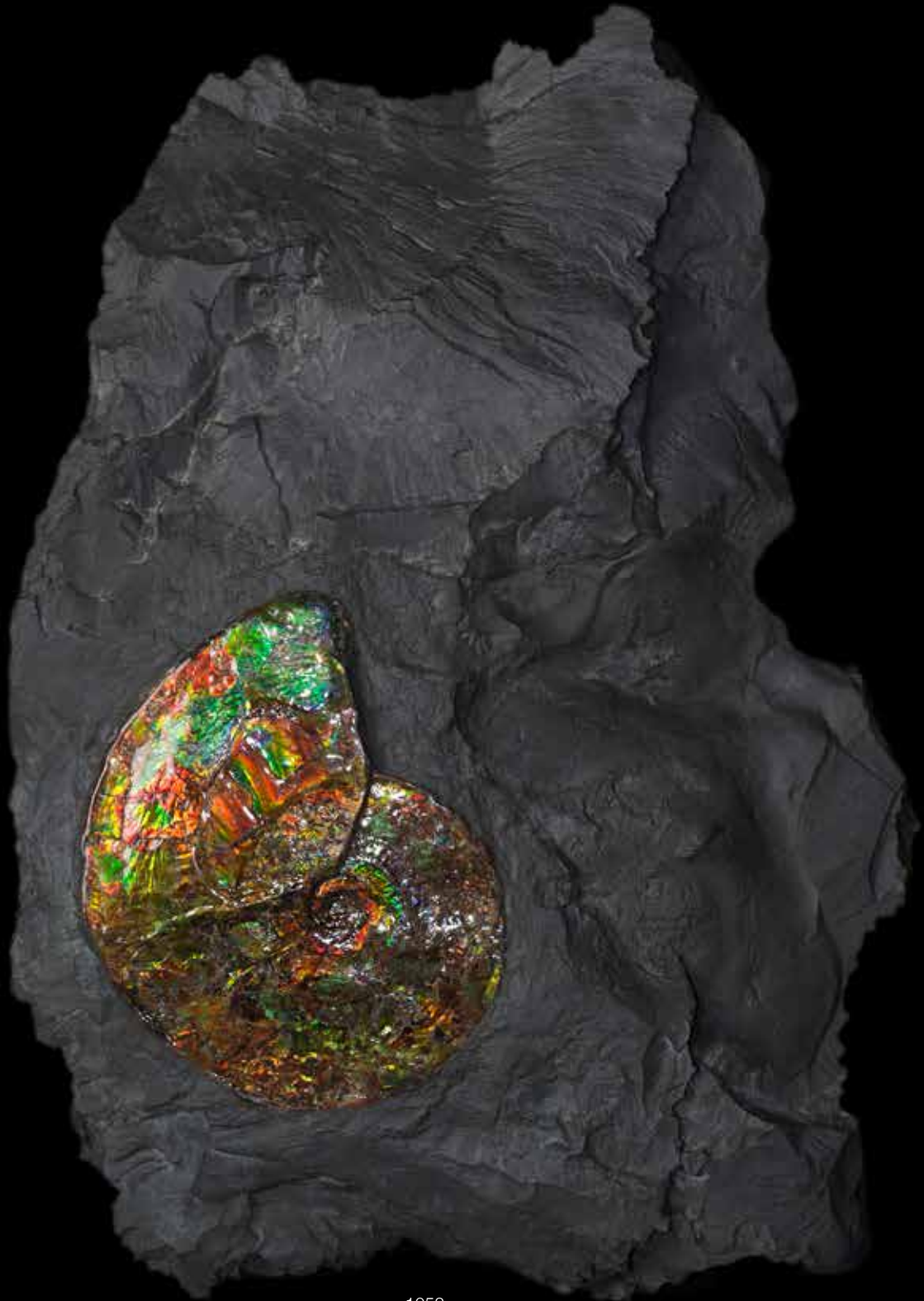
Placenticerias meeki

Late Cretaceous

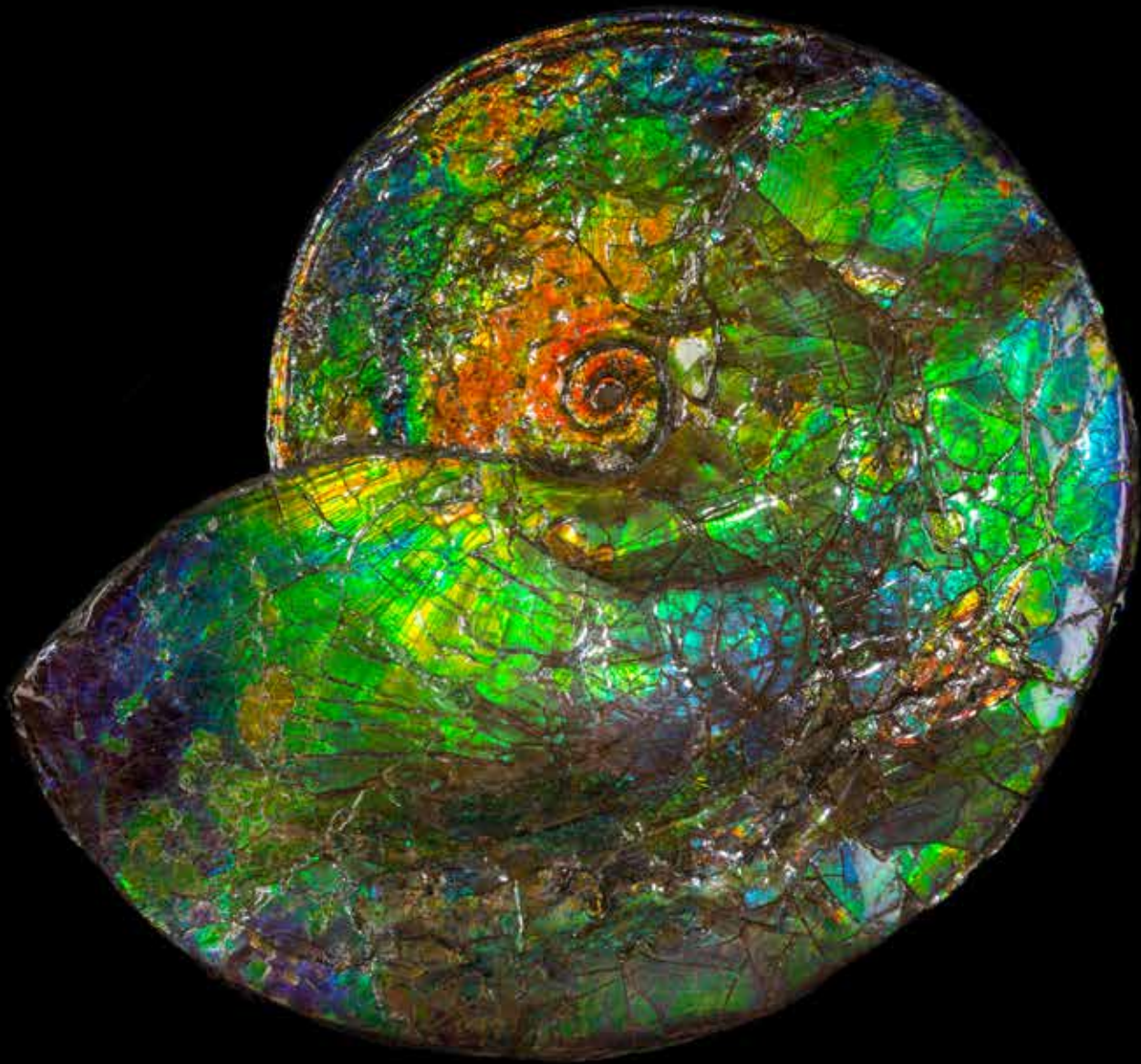
Bear Paw Formation, Southern Alberta, Canada

Naturally occurring in the shale matrix of its origin, this specimen displays all of the brilliant colors for which Bear Paw ammonites are desired – red-orange, greens, yellow and even some rarely seen blue-violet – contrasting beautifully in color and texture with the rich black stone matrix of the locality. The freestanding block of matrix is destined to provide a sculptural focal point in an interior, or a relevant geological context in a fossil or mineral collection. *Matrix measures 16 x 11in; Diameter of specimen measures 6 1/4in*

\$10,000 - 12,500



1052



1053

1053

ASTONISHING IRIDESCENT AMMONITE WITH RARE BLUE COLORATION

Placenticerias meeki
Upper Cretaceous Bearpaw Shale
Alberta, Canada

Rarely are blue-indigo and violet seen in these specimens, yet, in this example, these colors, and also turquoise, are present. Brilliant greens, some red-orange and yellow-gold accompany the rare blue palette in a breathtaking profusion of shimmering color. Prepared free of matrix. Coveted by collectors the world over, the finest ammonites from the Bear Paw Formation display remarkably brilliant colors not seen in ammonites from other localities. Bear Paw Formation ammonites are laboratory-prepared to remove matrix, then coated with a clear coat of stabilizer to protect the valuable outer layers of the specimens. The luminous fossilized material is also classified as a gemstone. *Diameter measures 18in*

\$40,000 - 50,000



1054

1054

TWO SPECTACULAR OPALIZED BELEMNITES IN MATRIX

Indeterminate Species, Cretaceous, Coober Pedy, Australia
As rare as fine fire opals are, they are much more rarely seen in fossils. The present exceptional pair of polished fossil belemnites radiates spectacular green and purple hues within natural stone matrix. Here is a rare opportunity to acquire gemstones contained within - not one, but two - fossils.

Matrix measures 6 1/2 x 5in; Specimens measure 2 1/4in and 1 2/5in, respectively

\$8,000 - 10,000



1056

1055 **NO LOT**

1056

MEGALODON TOOTH WITH SCRIMSHAW

Carcharocles megalodon, Miocene, New Caledonia, South Pacific Ocean, Australia

This 20-15-million-year-old *Carcharocles megalodon* tooth was found in a deep-water location (over 1,000 feet) after a three-day boat ride north of the small island of New Caledonia. In the present example, the intricate representation carved and inked into the outer enamel of the megalodon tooth features two humpback whales swimming with a large *Carcharocles megalodon* lurking beneath them. The seafloor is indicated by several types of corals and sponges. The unique art piece is signed and dated, 2005, by the renowned scrimshaw artist, Kelly Kennedy. Offered on a 3-inch Illusion display stand. *Diagonal measures 4 3/10in; Width measures 3 1/2in*

Signed and dated by the artist: Kelly Kennedy 2005

\$2,000 - 2,750



1057

1057

LARGE MEGALODON TOOTH

Carcharocles megalodon
Miocene
Australia

Though *Carcharocles megalodon* was the largest shark that ever lived, growing to more than 50 feet in length, most of the teeth recovered from this gigantic species are only 2-4 inches in height. The present impressive specimen measures six inches making it a covetable find. *Measures 6in*

\$2,000 - 3,000

To be sold without reserve



1058

CARCHAROCLES MEGALODON SHARK TOOTH COLLECTIONS

Carcharocles megalodon is the most massive carnivorous fish species to have inhabited the planet. Living sixteen million years ago, the gargantuan species is thought to have grown to a length approaching that of the contemporary blue whale. Fifty-one million years after the dinosaurs became extinct, *megalodon* trolled Earth's seas as an apex predator. Much is unknown about *megalodon* (meaning giant tooth), including its exact size. Scientists differ in their estimates of the length that this marine behemoth attained, suggesting linear measures from 40 to 100 feet. Scientists believe that this gigantic predator became extinct approximately five million years ago. Collecting data indicate that *megalodon* lost upper teeth more frequently than lower teeth, at an approximate ratio of eight to one. It is theorized that the upper teeth, which would have been used as tools to hack off chunks of flesh from prey, sustained the most wear. The following lots comprise collections of fossilized teeth from the famous behemoth.

1058

BOXED SET OF MEGALODON TEETH

Carcharocles megalodon

Miocene

California and world localities

From a private Boston collector a wonderful collection of 53 sharks teeth comprised of mainly *megalodon* teeth. All teeth are in amazing condition with great serrations. Offered in a wooden case. *Measures 1 to 3in*

\$2,500 - 3,500



1059

1059

COLLECTION OF MEGALODON SHARK TEETH

Carcharocles megalodon

Miocene

World localities

A very nice collection of 46 fossil *megalodon* teeth from a private Boston collector. *Housed in a wooden display box. Heights from 1 to 3 3/4in*

\$3,500 - 5,000

1060

LARGE COLLECTION OF SHARK TEETH

Carcharocles megalodon

Miocene

South Carolina and world localities

Offered is a fine collection of superb fossil shark teeth with amazing preservation and great serrations. Comprised of 47 teeth of which the majority are *megalodon*. The collection comes with a wooden display box. *Measures 1 1/2 to 3 1/4in*

\$5,000 - 7,000



1060

1061

RECONSTRUCTED MEGALODON SHARK JAW

Carcharias megalodon

Miocene, South Carolina

Featuring a fine collection of original *megalodon* teeth, this reconstruction contains three-row-deep dentition including 22 horizontal positions in the upper jaw and 22 horizontal positions in the lower, totaling 130 tooth specimens in all. The majority of the teeth used in this construction were found in coastal South Carolina. *Largest tooth measures 4 inches. Overall measurement: 54 x 52in*

\$12,000 - 15,000



1061



1062

1062

GROUP OF MEGALODON TEETH

Carcharocles megalodon

Miocene

South Carolina and world localities

A collection of 15 megalodon teeth from a private Boston Collection

ranging in size from 3 ¾ inches to 5 inches.

Only 3 of the teeth are less than 4 inches.

Measures 3½ to 5in

\$10,000 - 12,000

1063

GROUP OF MEGALODON TEETH

Carcharocles megalodon

Miocene

South Carolina and world localities

A fine collection of 18 fossil Megalodon teeth

from a private Boston collection. Two of the

specimen are in association with matrix. Five

of the teeth are 4 inches or larger. The largest

specimen measures 2 ½ x 5 1/2in

\$9,000 - 11,000



1063

1064

GROUP OF LARGE MEGALODON TEETH

Carcharocles megalodon

Miocene

South Carolina and world localities

Offered is a group consisting of 15 large to

very large Megalodon teeth

ranging in size from 3 ¾ to 6 ½ inches. Three

of the teeth are over 6 inches. Two of the

teeth are at least 6 ½ inches.

\$15,000 - 18,000



1064

1065

FISH EATING A FISH SIGNED BY CARL ULRICH

Diplomystus dentatus

Eocene

Fossil Butte Member, Green River Formation, Wyoming

Capturing a dramatic moment in prehistory, a *Diplomystus dentatus* died while trying to swallow too large a prey fish, a smaller *Diplomystus dentatus*, showing the cannibalistic tendencies of this species. Termed an *aspiration*, this type of event is rarely seen preserved. The present example displays excellent preservation; scales can be seen. Discovered and prepared by Carl Ulrich. Signed C J Ulrich. Measures 14 1/2 x 22in **\$6,000 - 8,000**



1065

1066

EOCENE PREDATORY FISH BY ULRICH

Phareodus encaustus

Eocene

Green River Formation, Wyoming

Filling the same ecological niche as today's piranha, *Phareodus encaustus* was a prominent predator of the prehistoric lake system comprising the famous Green River Formation. *Phareodus* remains are considered rare finds; predatory animals are always scarcer than prey. The present excellent specimen displays beautiful preservation, particularly in the fins and scales. Prepared in the laboratory of Carl Ulrich, one of the oldest and best-known modern preparators specializing in Green River Formation fossils. Signed C J Ulrich. Matrix measures 27 1/2 x 18in; Specimen measures 21in **\$4,000 - 6,000**

To be sold without reserve



1066

1067

FOSSIL FISH ASPIRATION

Diplomystus dentatus

Cockerellites liops

Eocene

Green River Formation

Fossil Butte Member

Lincoln County, Wyoming

The superb preservation of the fishes from the 18-inch layer of the Green River Formation in Wyoming is world-renowned. The present fossil fish specimens in matrix illustrate a rare occurrence in vertebrate fossils. The presentation of the fish preying upon another fish, known as an aspiration, tells the story of a dramatic conflict between a *Diplomystus dentatus* and a *Cockerellites liops*. The struggle was preserved in stone as the dying fish, having attempted to consume its prey, sank to the bottom of an ancient freshwater lake. Framed in tropical wenge wood and fitted with a cleat for wall installation. Measures 19 1/2 x 26 1/4 in

\$4,500 - 6,000



1067



1068



1069



1070

1068

BEAUTIFUL STINGRAY

Heliobatis radians

Eocene

Green River Formation, Fossil Butte Member, Wyoming

Among the most beautiful of all Green River Formation fishes, the whiptail stingray is a true stingray, not a skate. The tail *stingers* are sharply pointed with barbed edges, providing an effective defense mechanism. Here is a superb specimen with nearly perfect articulation down to the tip of the tail. *Measures 20 x 10in*

\$4,000 - 6,000

To be sold without reserve

1069

AESTHETIC FOSSIL FISH MURAL

Notogoneus osculus

Cockerellites liops

Eocene

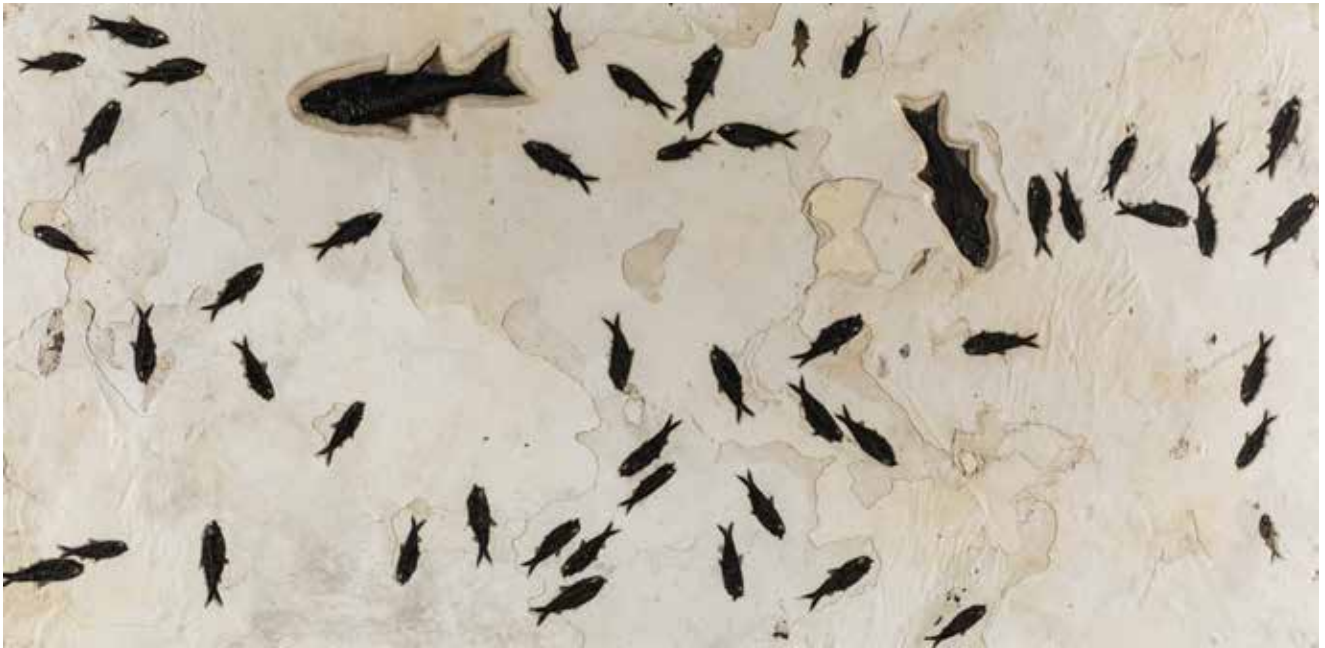
Green River Formation

Fossil Butte Member

Lincoln County, Wyoming

An exceptional natural mural displaying four fossil fish from the Eocene limestone shales of Lincoln County, Wyoming. The two large fish are *Notogoneus, osculus*, a bottom feeder. The smaller fish, *Cockerellites liops*, are ancient relatives of the modern bass and the freshwater sunfish. The high quality of the fossil fishes from the famous 18-inch layer of this geologic formation is internationally recognized. The stone has been backed with high grade plywood, and fitted with a French cleat for mounting. *Measures 29 1/2 x 47 1/2 in*

\$3,000 - 4,000



1071

1070

LARGE EOCENE FISH MURAL

Diplomystus dentatus

Eocene

Green River Formation

Fossil Butte Member

Lincoln County, Wyoming

A wonderful occurrence of three large fossil fish, *Diplomystus dentatus* from the Green River Formation are preserved naturally in association in Eocene aged limestone. The stone has been backed with high grade plywood, and fitted with a French cleat for mounting. *Measuring 39 x 49 in*

\$3,000 - 4,000

1071

NATURAL FOSSIL FISH MORTALITY PLAQUE

Mioplosus labracoides (2), *Diplomystus dentatus* (2), *Knighthia eocaena* (47)
Eocene

Green River Formation, Lincoln County, WY

Fifty-one beautifully preserved specimens distinguish this marvelous sampling of fishes from the famous Green River Formation, including two large, rare *Mioplosus labracoides*, two *Diplomystus dentatus* and forty-seven *Knighthia eocaena*, the official state fossil of Wyoming. The Green River Formation represents an entire ecosystem of flora and fauna, which lived within and around three lakes over fifty million years ago. The natural black-brown coloration of the fish specimens contrasts beautifully with the nicely textured limestone matrix.

Measures 8 x 4 feet

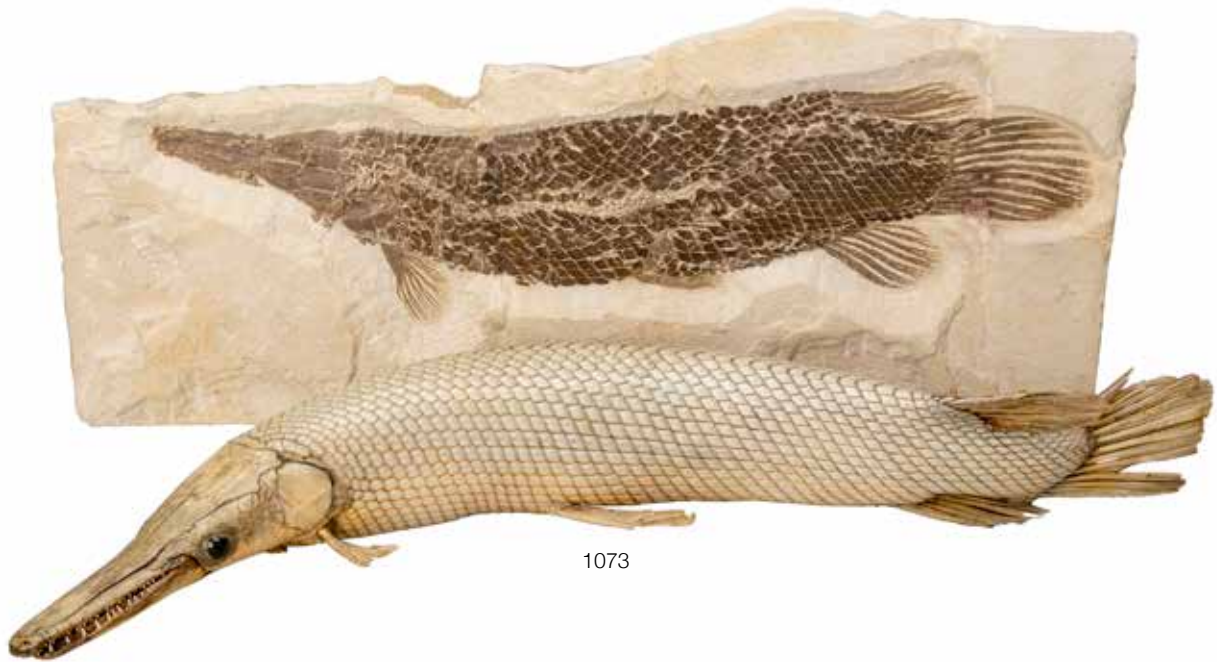
\$12,000 - 15,000



1071 (detail)



1072



1073

1072

SUPERB FOSSIL GAR FISH

Atractosteus simplex

Eocene

Fossil Butte Member, Green River Formation, Wyoming

Lazarus taxa, living fossils are organisms that were thought to be extinct, which are discovered in modern populations. The morphology of the living counterpart is so similar to the prehistoric predecessor that difficulty may be encountered in even differentiating modern from prehistoric species. Such is the case with the gar fish. The present beautifully preserved specimen, the species of which is sometimes referred to as the *simplex gar*, is one of the largest for this species yet known, measuring a magnificent thirty inches in length. It exhibits the characteristic ganoid (shiny, hard), diamond-shaped scales and medium length skull displaying many sharply pointed teeth in the jaws.

Length of specimen measures 30in; Matrix measures 12 3/4 x 33 1/2in
\$10,000 - 14,000

1073

EOCENE GAR FISH AND MODERN TAXIDERMY GAR

Atractosteus simplex

Eocene

Green River Formation, Fossil Butte Member, Wyoming

The primitive look of fossilized garfish is both beautiful and scientifically interesting. The long cylindrical body was covered with thick diamond shaped scales providing protection from other predatory fish. Though there are four described species from the Eocene-aged Fossil Butte Member, this genus is extremely rare and represents only one of every five thousand fish excavated. The present fossilized specimen is offered with a modern taxidermy example, illustrating the similarity of the prehistoric and the contemporary garfish. Measures 26 1/4 x 10 1/2in (2)

\$3,000 - 5,000
To be sold without reserve



1074



1075

1074

FOSSIL PADDLEFISH

Crossopholis magnicaudatus

Eocene

Green River Formation, Wyoming

Paddlefishes are relatively rare in the Green River Formation.

Paddlefishes, like their close relatives, the sturgeons, lack robust solid vertebrae of the type found in other bony fishes of the Fossil Butte Member. Not a filter feeder, as is the modern Paddlefish, *Crossopholis* fed mainly on other fishes. The present stunning *Crossopholis magnicaudatus* specimen exhibits superior preservation. Boasting a dimensionality rarely seen in a cartilaginous fish, the smallest scales and details are visible throughout the body. (Cartilage, more delicate than bone, is rarely preserved in fossils due to the rapidity with which it decays.) The stellate bones of the rostrum (the prominent portion of the head) display amazing dimension and detail. The fascinating stomach area of this specimen is filled with numerous partially digested fish. Offered in the original matrix with no restoration. *Matrix measures 33 x 13in; Specimen measures 30in*

\$25,000 - 35,000

1075

EOCENE BOWFIN FISH FOSSIL BY ULRICH

Amia pattersoni

Eocene

Green River Formation, Fossil Butte Member, Lincoln County, Wyoming

The name *bowfin* comes from the long arching dorsal fin present in this genus. The fossil bowfins of the Green River Formation are represented by two distinct species, *Amia pattersoni* and the short bowfin, *Cyclurus Gurleyi*. The present *Amia pattersoni* specimen was collected and prepared by Carl Ulrich, one of the oldest and best-known modern preparators specializing in Green River Formation fossils. In 1960 President Dwight Eisenhower purchased a large *Diplomystus dentatus* from Carl Ulrich to present as a gift to Japan's Emperor Hirohito from the American people. Many Ulrich pieces are in museums and private collections worldwide. *Signed C J Ulrich. Measures 26 x 17in*

\$10,000 - 12,500

To be sold without reserve



1076

1076

SPECTACULAR BOWFIN FISH

Amia uintaensis

Eocene

Green River Formation, Fossil Butte Member, Lincoln County, Wyoming

Amia are considered exceedingly rare in the Green River Formation, which is known for its exceptionally well-preserved aquatic fossils. Two factors are credited for the superb level of preservation of fossils from this ancient lake system: 1) the anoxic (free of oxygen) environment of the bottom of the exceptionally deep lakes which allowed specimens to fossilize before decay set in, and 2) a cold period during the Eocene which allowed dead fish to sink faster due to a less inflated air bladder. *Amia pattersoni* was probably a voracious predator that fed mainly on other fishes. The present specimen is preserved with four small fossil fish, two *Cockerellites liops* and two *Knighthia eocaena*, the State Fossil of Wyoming. The *Amia* is articulated so well that even many of the fin tips are present. With its massive skull and fine preservation, this specimen would be an impressive addition to any collection. Length of specimen measures 28in; Matrix measures 24 x 78 in

\$15,000 - 25,000



1077

1077

RARE GREEN PETRIFIED WOOD LOG SECTION

Woodworthia sp.

Triassic

Chinle Formation, near Holbrook, Arizona

Some thirty years ago, in an isolated deposit in northern Arizona in chromium-bearing formation, a small amount of green petrified wood was found, from an ancient spiny wood known as *Woodworthia*. Chromium is the same element that gives emeralds their magnificent green color. Length 8in

\$2,000 - 2,500



1078



1079

1078

FRENCH FOSSIL FERN

Polymorphopteris

Cretaceous

France

A beautifully preserved fern, with a partial fern, on matrix.

Measures 18 x 11 in

\$2,000 - 2,500

To be sold without reserve

1079

MADAGASCAR PETRIFIED WOOD TABLETOP

Araucaria

Triassic

Madagascar

A marvelous, two-inch thick specimen of petrified wood

from Madagascar. Soft tan colors accented with brown

edges provide a neutral pallet. *Measuring 36 x 28 x 2 in*

\$3,500 - 4,000

1080

PETRIFIED WOOD

Araucarioxylon

Triassic

Chinle Formation, Arizona

An attractive combination of warm browns, magenta

and white are seen in a round section of prehistoric

tree trunk. Some growth rings are also seen. *Diameter*

measures 20 in

\$2,500 - 3,500

To be sold without reserve

1081

PETRIFIED WOOD

Araucarioxylon

Triassic

Chinle Formation, Arizona

Fascinating patterning caused by the presence of the

original tree's growth rings, and seepage into the cellulose

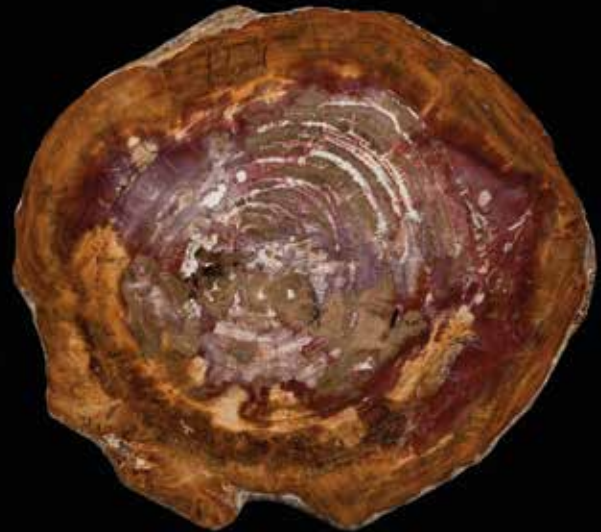
of mineral-laden water, produced gorgeous texture in this

petrified wood slab. Rust-red, white, black and magenta

colors are present. *Diameter measures 32 in*

\$4,500 - 5,500

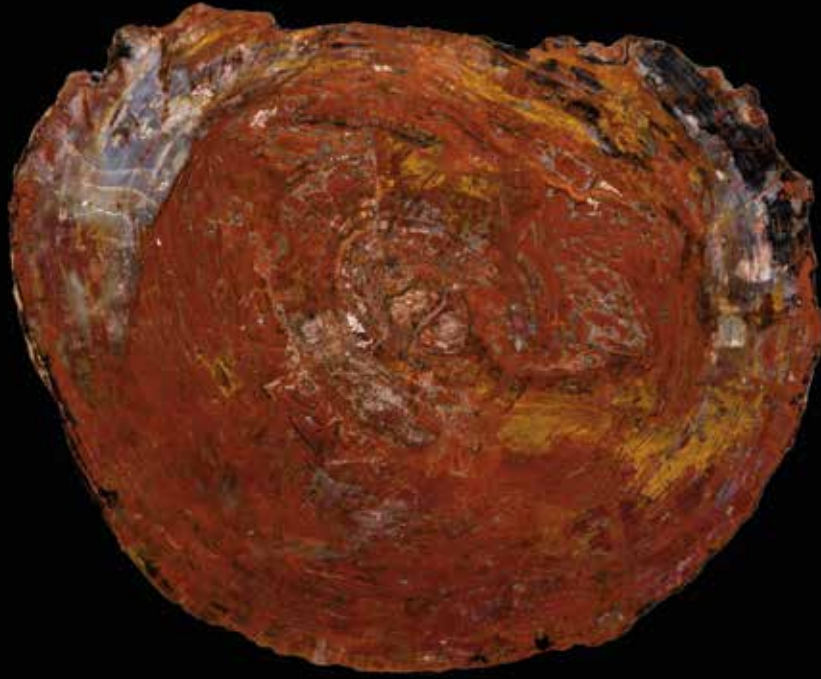
To be sold without reserve



1080



1081



1082



1083



1084



1085

1082

PETRIFIED WOOD SLAB

Araucarioxylon

Triassic

Chinle Formation, Arizona

A highly polished petrified wood section exhibits the brilliant red coloration for which specimens from the Chinle Formation are prized. Rich golden tones, gray and black are seen. A covetable, aesthetically pleasing piece. *Diameter measures 42in*

\$6,500 - 7,500

To be sold without reserve

1083

POLISHED PETRIFIED WOOD STUMP

Araucarioxylon

Triassic

Chinle Formation, Arizona

A petrified wood stump displays marvelous natural bark texture and a polished top, revealing growth rings. *Measures 19 x 16in*

\$2,000 - 3,000

To be sold without reserve

1084

HALVED ARIZONA PETRIFIED WOOD LOG

Araucarioxylon arizonicum

Triassic

Chinle Formation, Arizona

A petrified wood log from Arizona has been halved to display its wide range of colors in a waterfall effect. This sculptural piece has been hand polished to form on the top surface, giving it an organic shape with a diamond polish finish. *Measuring 15 1/2 x 16 1/2 x 7in*

\$3,500 - 4,000

To be sold without reserve

1085

PETRIFIED WOOD LOG

Araucarioxylon arizonicum

Triassic

Chinle Formation, Arizona

A fine Arizona petrified wood log with a hand-polished top, showing strong reds, blacks, and greys. This specimen is from massive conifer pines, which grew in a tropical climate over 200 million years ago.

Measuring 23 x 16 1/2 x 9 1/2 in

\$2,000 - 3,000

To be sold without reserve



1086

FOSSIL PALM FLOWER BY CARL ULRICH

Sabalites sp.

Priscacara serrata

Eocene

Ulrich Quarry, Green River Formation, Wyoming

Fossilized palm fronds are rare in the Green River Formation, but flowers from these prehistoric plants are rarer still. In the present example, fine details of the delicate flower are seen. Also present is a single fossil fish and organic matter. Prepared in the laboratory of Carl Ulrich, one of the oldest and best-known modern preparators specializing in Green River Formation fossils. *Measures 22 x 56in*

\$10,000 - 12,500

1086

1087

FOSSIL LEAF COLLAGE

Urticeae, Araliaceae, Lagokarpos lacustris,
Astronium, Nelumbo sp.

Eocene

Green River Formation, Lincoln County,
Wyoming

A unique assemblage of fifty-nine fossils primarily from the Fossil Butte Member of the Green River Formation mounted together in a vertical presentation. Composed of fossil leaf specimens, accompanied by a fossil fish, *Cockerellites liops*, and a fossil bird feather.

Measures 36 x 80in

\$25,000 - 35,000



1087



1088

1088

LARGE FOSSIL SEED FERN

Alethopteris

Late Carboniferous

Llewellyn Formation, St. Clair, Pennsylvania

This is an extremely large plate of fossil seed ferns from deposits near St. Clair, Pennsylvania. A specimen of this size and quality is rarely seen outside of a museum exhibit. Fossil seed ferns of many different types are represented on this extraordinary plate. They are preserved as a thin film of white *pyrophyllite* on black shale. The presentation is one complete, unbroken slab which can be wall mounted. *Measures 29 1/2 x 42in*

\$10,000 - 15,000

1089

PAIR OF MATCHED FOSSILIZED PALM MURALS, CLEATED FOR WALL DISPLAY

Sabalites sp.

Eocene

Green River Formation, Wyoming

Recently recovered from the Eocene sediments of the Green River Formation in Wyoming, this pair of palms represents part and counterpart of a fortuitous discovery of one palm frond specimen on a cleavage plane of stone matrix. The splitting of the limestone revealed two fossils in one. Palm fronds are considered rare finds due to the fragility of the cellulose of which they were composed in life. They are often regarded as the most aesthetically appealing finds from this prehistoric lake system, which, 51 million years ago, teemed with a wide variety of subtropical species. Hand-excavated and painstakingly laboratory-prepared. The coloration of the fossils and limestone is natural. Fitted with a cleat system for ease of wall display.

The Green River Formation is considered by paleontologists to be a "lagerstätte" – a natural accumulation of fossils representing an entire ecosystem - in which a subtropical Eocene environment supported flora and fauna thriving within a system of three prehistoric lakes 51 million years ago. Beautifully preserved in the deep lake bottom silt, due to lack of oxygen and low temperature, dying animals and plants that were left undisturbed by predators and water current were perfectly preserved. *Each mural measures 73 1/2 x 30in*
\$20,000 - 25,000



1089



1090

1090

FOSSIL PALM BY ULRICH

Sabalites sp.

Eocene

Ulrich Quarry, Green River Formation, Wyoming

Evoking a contemporary artwork, an Eocene fossil palm frond has been prepared preserving the natural presentation of a frond which fell to the bottom of a prehistoric lake fifty-one million years ago. The rich black-brown coloration of the palm frond contrasts beautifully with the limestone matrix. Also present is a single fossil fish.

Prepared in the laboratory of Carl Ulrich, one of the oldest and best-known modern preparators specializing in Green River Formation fossils. *Measures 70 x 70in*

\$25,000 - 35,000



1091

1091

EXTRAORDINARY PALM FROND

Sabalites sp., *Diplomystus dentatus*, *Phareodus testis*

Eocene

Green River Formation, Wyoming

Arguably the most aesthetically appealing finds from the Green River Formation are its amazing palm fronds. Considered rare in this geologic formation due to the low probability of preservation of the delicate organic material, these wonderful fossilized plants evoke the subtropical climate of North America during the Eocene: In the high desert of what is now known as Wyoming, an ancient lake system, surrounded by lush subtropical vegetation, teemed with fishes, turtles and crocodiles 51 million years ago.

The present offering is a superlative palm frond specimen in its natural limestone matrix preserved along with a *Phareodus testis* and a *Diplomystus dentatus* fossil fish. Very deep black-brown in color, it is from the layers of prehistoric sediment commonly referred to as the oil shale layers of this geologic formation, which are gray-taupe in color. Framed in wood and fitted with a cleat system for ease of wall display.

Measures 63 1/2 x 67 1/2 in

\$30,000 - 40,000

1092 - 1093

NO LOTS



1094

1094

MASSIVE STROMATOLITE SLAB

Late Precambrian

Minnesota

Stromatolites were created by a form of blue-green algae believed to be among the earliest forms of life on Earth. The present 2 – 1.8-billion year-old specimen is one of the largest slabs of Minnesota stromatolite ever offered at auction. This museum quality specimen has been polished to a reflective sheen and exhibits alternating bands of red jasper, a form of microcrystalline quartz, and metal-gray toned hematite – materials which are characteristic of the locality. The combination of ferrous iron and oxygen caused precipitation of the hematite minerals along with the silica (quartz). *Measures 90 x 55in*

\$50,000 - 80,000



1095

1095

JURASSIC DRAGONFLY

Stenophlebia sp.

Upper Jurassic, Tithonian Stage

Solnhofen, Eichsatt, Bavaria, Germany

A very finely preserved dragonfly displays intricate impressions of wing veins, a remarkable attribute for any insect fossil. From the famed lithographic limestone of Solnhofen, Germany. *Matrix measures 7 ½ x 10in; Specimen measures 4 x 5 ¾in*

\$1,800 - 2,200

To be sold without reserve



1096

1096

FOSSILIZED OCTOPUS

Paleoctopus sp.

Cretaceous

Lebanon

Rarely is a fossilized octopus found; due to the delicate nature of these creatures, decay generally takes place long before fossilization can occur. In this extraordinary example, the arms have been preserved, as well as the main portion of the body. *Measures 17 ¼ x 13 1/4in*

\$3,500 - 4,500

To be sold without reserve

1097

COLLECTION OF FOUR CRINOIDS

Cyanthocrinites lowensis, Pachylocrinus aequalis, Cyanthocrinus sp.,

Arthroacantha

Mississippian

Crawfordsville, Indiana

Ordovician

Sylvania, Ohio

A collection of fine crinoids illustrates four species found at two famous American localities including a beautiful pyritized specimen. Also known as sea lillies, crinoids belong to the invertebrate phylum Echinodermata, and have their own class, Crinoidea. Some species attach to the ocean floor by a root, a stem attaches the root to the crown, the crown has arms, and the arms have feather-like pinnules. These crinoids can move by manipulating the *arms* of the root. Crinoid forests swayed back and forth in the ocean currents. Crinoids are filter feeders, grabbing microscopic particles to feed on. Distant relatives include the starfish, brittle star and sea urchin. *Measures 9 ¼in, 6in, 4 ¾in and 5in, respectively (4)*

\$2,000 - 2,500

To be sold without reserve



1097





1098

HOLZMADEN CRINOID

Seirocrinus subangularis

Jurassic

Posidonienschiefer Formation,
Holzmaden, Germany

A single exquisite crinoid, or sea lily, has been expertly prepared in the rich black matrix of the famed fossil locality of Holzmaden, Germany. Also present are two ammonites displaying the beautiful golden-toned pyrite for which the finest examples from the locality are prized. Below the crinoid is preserved organic matter on which the sea lily attached itself in order to float in the Jurassic seas filter-feeding on small marine organisms. *Measures 95 x 27in*

\$9,000 - 12,000

1099

**MAGNIFICENT FOSSIL SEA LILY MURAL,
CLEATED FOR WALL DISPLAY**

Seirocrinus subangularis

Jurassic

Posidonienschiefer Formation,
Holzmaden, Germany

Exceptional natural composition and very fine preservation distinguish this mural displaying four crinoids, or sea lilies. The presentation of the sinuous stems and beautifully preserved flowers could not be more aesthetically appealing. Subtly shimmering pyrite inclusions impart a glowing presence to these fossilized animals, which are plant-like in appearance. These individuals would have floated on a piece of driftwood (seen preserved on the lower part of the plate), filter-feeding in the warm Jurassic sea. Also seen is a belemnite – a fossilized squid relative - near the left edge of the plate. The mural is fitted with a cleat system for ease of wall display.

Arduous laboratory preparation is required to reveal fossils of this locality from within their matrix, which is of similar density to the fossils themselves. Fossils from Holzmaden, Germany are highly desired for their exceptional preservation. Also appealing is the richly colored black-brown shale matrix of this locality. Remains of animals from the warm, shallow Jurassic seas in the region now known as Germany reflect the warm environment of the Earth 180 – 170 million years ago. *Measures 90 ½ x 57in*

\$130,000 - 170,000

1100

NO LOT





1101

1101

FOSSIL MAMMAL SKULLS- RESEARCH QUALITY CAST REPLICAS

Canis dirus

Felis atrox

Xenosmilus hodsonae

Castoroides ohioensis

Pleistocene

North America

A collection of four research quality cast replicas of mammal skulls includes a Saber cat, a dire wolf, an American lion, and a Giant Beaver.

largest measures 17 x 10 1/2in

\$2,000 - 2,500

To be sold without reserve

1102

WOOLLY MAMMOTH TOOTH, DINOSAUR BONE AND FOSSIL CORAL

Mammuthus primigenius, Indeterminate

Dinosaur and Coral Species

Pleistocene

Alaska

Two polished slabs - a cross section of agatized dinosaur bone measuring 8 x 5 inches and a fossil coral specimen measuring 7 x 5 inches - are offered together with a fine mammoth tooth. Measuring 8 1/2 x 9 1/2 inches (3)

\$2,000 - 3,000

To be sold without reserve



1102



1102

1103

HYAENODON FOSSIL SKULL

Hyaenodon mustelinus

Oligocene

Sioux County, Nebraska

From an old collection, this complete *Hyaenodon mustelinus* skull boasts an intact set of dark brown teeth, including one-inch-long incisors, on original stone matrix which serves as a base. A 33-30 million year old carnivorous mammal, Hyaenodonts were the last surviving family of Creodonts, which looked like hyenas with large heads. *Hyaenodon* was the most specialized of all Creodonts. Their lack of binocular vision may have put them at a disadvantage when competing with other more advanced and faster predators. Oreodonts were probably their favorite prey; when Oreodonts became extinct, the Hyaenodonts became extinct also. In addition to sharp incisor teeth, *Hyaenodon* also possessed carnassial teeth with the last upper premolar and the first lower molar having sharp edges to rip flesh.

Measuring 7 1/4 x 4in

\$2,750 - 3,750



1103

1104

CAVE BEAR SKELETON

Ursus spelaeus

Pleistocene

Russia

Displaying an intimidating stance, a fine cave bear skeleton has been mounted in a lifelike presentation on hind legs reaching upward with jaws open, exhibiting the formidable teeth of a predator. Cave bears inhabited Europe, Eastern Europe and parts of Asia until they went extinct at the end of the last Ice Age. As shown by the archaeological record, they were contemporaries of modern humans: many cave sites show signs of competition between cave bears and humans as the two species battled for shelter for thousands of years. Evidence shows that both Neanderthals and Cro-Magnons hunted cave bears; scientists theorize that the demise of the cave bear may have been, in part, due to human hunting. The present cave bear specimen is mounted on a custom steel armature, surmounting a movable wooden base with castors. *Height 110 in*

\$18,000 - 25,000

To be sold without reserve



1104



1105

1105

FOSSIL WALRUS SKULL

Odobenus rosmarus

Pleistocene

Alaska

From the permafrost of Alaska comes this excellent fossil walrus skull, complete with lower jaw, teeth and both tusks. The exposed portion of each spectacular tusk measures approximately 18 ½ inches. The current specimen of Pleistocene sea life is offered on a custom Lucite display stand. *Skull measures 16 ½ x 13 ½ in*

\$4,000 - 5,000

To be sold without reserve



1106

1106

DIRE WOLF SKULL FROM LA BREA TAR PITS

Canis dirus

Pleistocene

La Brea Tar Pits, California

Very rarely is a fossil from the famed La Brea Tar Pits made available on the market. The present fine specimen was originally discovered and collected circa 1960.

The large number of *Canis dirus* fossils found at Rancho La Brea suggests that this animal hunted in packs. It is theorized that these packs comprised large social groups, as the prey animals of the Pleistocene were very large. Though smaller than the modern timber wolf, the skeleton of *Canis dirus* was more robust, indicating a stronger musculature. Its relatively massive skull structure indicates that the creature's jaws could produce a powerful shearing force for tearing the flesh of its prey. The massive size of its dentition, which is more powerful than the dentition of any other species of *Canis*, lack a developed crushing surface, suggesting that the teeth were used for smashing large bones. *Length 12 1/2in*

This lot is accompanied by a Statement of Property Propriety and Provenance, a notarized sale document, a restoration diagram, photographs and other pertinent documents.

\$50,000 - 70,000



1106 (detail)



1107



1107 (detail)

1107

**PEERLESS SABER-TOOTH CAT SKULL,
WITH SPEAR POINT-SHAPED PERFORATION**

Smilodon fatalis

Pleistocene

Marion County, Northern Florida

Nearly complete *Smilodon fatalis* skulls with all teeth, including sabers, - as seen in this saber-tooth cat skull - are extraordinarily rare. Yet, an even more outstanding feature of the present specimen is the presence of a diamond-shaped perforation within the temporal/squamosal portion of the skull. This extraordinary discovery may represent evidence that Clovis or pre-Clovis people interacted with *Smilodon fatalis*. An analysis of the defect, carbon-14 dating and circumstantial factors have been documented to support this hypothesis. The unrivaled specimen was discovered by a diver at a sinkhole site, in an underwater cave, in Marion County, Florida, where numerous Pleistocene fossils have been recovered. One saber is remarkably complete; the other displays some restoration.

Similar in weight to the modern Siberian tiger, though not closely related, *Smilodon fatalis*' body weight ranged from 350 to 600 pounds. The genus *Smilodon* lived throughout North and South America 1.6 million years ago until the early Holocene ten thousand years ago. Fossils of *Smilodon fatalis* are not particularly common in Florida, but there have been many *Smilodon* fossils found across the United States, such as the large number of *Smilodon* fossils discovered at the La Brea Tar Pits in California. *Measures approximately 12.5 x 7 in*

This lot is accompanied by a Statement of Property Propriety and Provenance, a Radiocarbon Analysis Report, a restoration diagram, photographs and other pertinent documents.

\$180,000 - 220,000



1108

1108

RARE NIMRAVID – SKELETON IN MATRIX

Pogonodon platycopis

Late Oligocene

White River Badlands, South Dakota

Millions of years before members of the cat family evolved into saber-tooths, a group of now-extinct, primitive carnivores occupied the same niche. Often referred to as *false saber-toothed cats*, these were the Nimravids. In life, *Pogonodon platycopis* would have approximated the size and weight of a modern jaguar or African lioness. The powerfully constructed forelimbs likely aided this carnivore in hunting prey that greatly exceeded their own weight. The shortened cranium accommodated the formidable upper canines, which were used for stabbing and bleeding prey. Stalking and ambush were likely its predatory strategy.

Pogonodon platycopis has not been formally described in the paleontological literature, which provides desirable research opportunities. The present specimen is a nearly complete individual, articulated in the original matrix, displaying an extremely fine skull and well-preserved sabers. A superb 9 ½-inch-long skull, displaying fine dentition, heightens the quality of this specimen. The formidable upper canines are original, measuring approximately 3 inches along the outer curve. *Matrix measures 38 x 18 in*

\$80,000 - 100,000



1108 (detail)



1109

IMMENSE BLUE MAMMOTH TUSK

Mammuthus primigenius

Pleistocene

Yukon, Canada

One of the largest *blue* mammoth tusks known, this extremely rare and unique mammoth tusk is from Canada. Entombment for thousands of years in the permafrost produced the spectacular color of this extraordinary tusk from an extinct member of the Elephantidae family, which ranged throughout Eurasia and North America during the Pleistocene. Most tusks exhibit creams, tan and browns, but only occasionally does a *blue* tusk emerge from the prehistoric permafrost. This example had been buried in a large deposit of the mineral vivianite, producing its amazing blue color. The distinctively curved tusks of the woolly mammoth are thought to have been used to help dig away the snow of the Ice Age tundra while feeding, and also may have been used in intraspecific combat, in competition for mates, for example. The massive size, exceptional curve and amazing blue coloration distinguish this example. The complex design of the metal stand was created to harness the extraordinary weight and curvature of the tusk, allowing the viewer the opportunity to appreciate every angle and color of this very rare piece. *Length 12 feet; Weighs 285 pounds*

\$180,000 - 220,000

1110

SUPERB FOSSIL WOOLLY MAMMOTH TUSK

Mammuthus primigenius

Pleistocene

Alaska

Entombment for thousands of years in the Alaskan permafrost produced the alluring bluish coloration of this extraordinary tusk from an extinct member of the Elephantidae family, which ranged throughout Eurasia and North America during the Pleistocene. Most tusks exhibit creams, tan and browns, but only occasionally does a *blue* tusk emerge from the prehistoric permafrost. This example had been buried in a large deposit of the mineral vivianite, producing its amazing blue color. The distinctively curved tusks of the woolly mammoth are thought to have been used to help dig away the snow of the Ice Age tundra while feeding, and also may have been used in intraspecific combat, in competition for mates, for example. The present specimen is offered on a custom base of contemporary design, which caresses the curvature of the tusk while allowing the viewer to appreciate every angle and color of this fascinating piece. *Measures 108in and weighs 90 pounds*

Measures 108in and weighs 90 pounds

\$75,000 - 85,000



1110



1111



1112



1113



1114

1111
LARGE MOSASAUR JAW WITH TEETH

Mososaurinae Glogidensini prognathodon
 Cretaceous
 Sidi Daoui, Khouribga, Morocco

From the famous phosphate beds of North Africa, this 65 million-year-old jaw specimen from the Age of Dinosaurs represents one of the most formidable carnivores of the Cretaceous seas. Mosasaurs were powerful swimmers with four paddle-like limbs on a long, streamlined body. Their large head boasted elongated jaws with many deadly teeth. The present well-preserved jaw specimen is exceptionally large, displaying thirteen ferocious-looking teeth, and measuring over 34 inches in length. Offered on a custom metal base.

\$4,000 - 5,000

Offered on a custom metal base.

1112
FOSSIL CROCODILIAN SKULL

Dyrosaurus phosphaticus
 Eocene

Boujniba, Morocco, North Africa,

Skulls of fossilized mesosuchians are rare, especially those with lower jaws. The present, virtually complete, specimen is a very large 55-million-year-old mesosuchian skull with nearly complete dentition comprising 68 teeth. Only seven of these teeth show restoration, to the tips only. The remaining teeth are in their natural state, with some natural wear, which occurred during the life of the individual. Skull of this size and quality are quite rare. Crocodylians enjoyed two bursts of prosperity. One came during the Jurassic, when a group called the mesosuchians lived in both the old and new world. The second great wave of crocodylian progress began at the dawn of the Cretaceous, giving rise to today's groups. All displayed large upper temporal openings with vertebrae that were flattened or slightly convex at both ends. Vertebrae and isolated teeth are the most commonly found mesosuchian fossils. Offered on a custom base with identification plate. Measures 39 1/4 x 10 1/2 x 10 1/2in

\$5,000 - 6,500

To be sold without reserve



1115

1113
STYLEMYS FOSSIL TORTOISE

Stlyemys nebrascensis Oligocene
 White River Badlands
 South Dakota

Stlyemys was the first fossil tortoise belonging to the order *Testudines* discovered in the United States. Offered is an extremely fine example of this species with all original shell.

Measures 20 x 17in

\$4,000 - 6,000

To be sold without reserve

1114
RARE JUVENILE FOSSIL TURTLE

Baptemys wyomingensis
 Eocene

Green River Formation, Fossil Butte Member, Lincoln County, Wyoming

The rarest of all turtle fossils from the limestone sediments of Southwestern Wyoming are the juvenile specimens. The present example is one of a handful of known specimens of this species. Discovered in 1990, it has been in a private collection since that time.

Specimen measures 6 3/8in. Matrix measures 7 1/4 x 6 1/2in

\$5,000 - 7,000

1115
JUVENILE HARD SHELL FOSSIL TURTLE

Baptemys sp.
 Eocene

Green River Formation

Fossil Butte Member, Lincoln County, Wyoming

Juvenile specimens are the most rare of all turtle fossils from the Green River Formation of Southwestern Wyoming. One of a very few known specimens of its species, the present example has been in a private collection since it was discovered in 1994. Specimen measures 5in; Matrix measures 7 1/4 x 6in

\$5,000 - 7,000



1116



1117

1116

EOCENE FOSSIL TURTLE

Trionyx sp.

Eocene

Green River Formation, Lincoln County, Wyoming

The exceptional preservation of this diminutive turtle specimen makes it a rarity among turtles found in the F-2 Horizon of the Green River Formation. The exquisite golden-toned patterning of the matrix also contributes to its value as a gorgeous display piece. A soft-shelled aquatic turtle, *Trionyx* still lives today. Modern *Trionychid* turtles are found in Africa, Asia, Malaysia and North America. *Matrix measures 12 x 15 1/2in; Length of specimen measures 10 1/2in*

\$10,000 - 12,500

To be sold without reserve

1117

JUVENILE TURTLE – PART AND COUNTERPART

Chisternon undatum

Fossil Butte Member, Green River Formation, Lincoln County, Wyoming

This turtle is from the extinct family *Baenidae*, which comprises about twenty species. Only two species have been found in the Fossil Butte Member of the Green River Formation. *Positive/negative* presentations are the result of the fortuitous discovery of a fossil on a rock's cleavage plane, leaving portions of the same fossil on two surfaces. This baby individual displays a carapace (shell), which has not yet developed. Turtles are very rare in the Green River Formation; juveniles of this species are known by approximately twelve complete specimens originating from the near shore deposits located on Dempsey Ridge in Lincoln County, Wyoming. This is a superb example of both beauty and scientific appeal. *Specimen measures 4 1/8in ; Positive portion of matrix measures 5 1/2 x 8 1/2in; Negative portion of matrix measures 5 3/4 x 7in*

\$10,000 - 12,500



1118



1119

1118

MAGNIFICENT FOSSIL TURTLE – NEWLY NAMED SPECIES

Axestemys byssinus

Eocene

Green River Formation, Wyoming

Recently named by science, *Axestemys byssinus*, a species of the soft-shelled turtle family, reached the greatest size of all Green River Formation turtles. The soft-shelled turtles lived through the Cretaceous, survived the extinction of the dinosaurs and still exist today, though smaller in size than their Eocene ancestor. Modern trionychid turtles are found in Africa, Asia, Malaysia and North America. Trionychidae, the soft-shelled turtle family, are distinguished from other turtles by the lack of ornamentation on the surface of the ventral (belly) bones, a lack of sculpturing along a broad band that surrounds the carapace (upper shell), and the broad nuchal (nape of neck area) that lacks thickness and is minimally connected with the rest of the carapace.

Large turtles from the Green River Formation are rare, and the present specimen is not only one of a small number of excellent specimens in existence today, it is particularly distinguished as an example of a newly named species. Framed in wood and fitted with a cleat system for ease of wall display. *Measures 71 1/2 x 85 1/2 in*

\$150,000 - 200,000

1119

PEERLESS JURASSIC MARINE REPTILE

Leptoperygus acutirostris

Jurassic

Poisdonienschiefer Formation, Holzmaden, Germany

A magnificent example of a fascinating inhabitant of the Jurassic seas, from the Lias epsilon layer in Holzmaden, this ichthyosaur specimen exhibits superb preservation and fastidious preparation. The specimen, from an old German collection, displays unusually predominant golden hues; the gorgeous metallic sheen is produced by the mineral, pyrite. The skeleton, seen in a lateral (side view) presentation, is virtually complete. Countless needle-like teeth and the large orbit (eye socket) attest to the carnivorous habit of the species.

While dinosaurs ruled the landmasses, the ichthyosaurs shared the marine environment with the other large marine reptiles, the plesiosaurs and mosasaurs. Ichthyosaurs were live bearers; they never left the water. Yet, lacking gills, they breathed air, as do modern whales. The first ichthyosaurs appeared in the Triassic.

Fossils from the famous *Holzmaden* quarries are dated at 180 – 170 million years. Animals from this locality lived during the Jurassic Period when the whole of Europe was submerged under a warm, shallow tropical sea. Preparation of fossils from Holzmaden is particularly arduous due to the similarity in densities of the fossilized material and the matrix. The ichthyosaur is believed to have filled a similar ecological niche as today's dolphin. Of all known reptiles, ichthyosaurs were best adapted to a marine existence. *Measures 39in; Matrix measures 47 x 19 1/2in*

\$40,000 - 50,000



1120

HOLZMADEN ICHTHYOSAUR

Largest Known *Stenopterygius quadriscissus* Marine Reptile

Stenopterygius quadriscissus

Jurassic

Posidonienschiefer Formation, Holzmaden, Germany

Discovered between 2008 and 2010, this is the largest known specimen of the species, *Stenopterygius quadriscissus*, to have been recovered from the famous site of Holzmaden, Germany. It is from the lower Jurassic, Lias epsilon 2. Seen in a unique dorsal presentation (as though viewed from above), the gigantic, marvelously complete marine reptile is preserved in irregularly shaped matrix. A fossilized belemnite (a squid relative) is seen in the lower portion of the matrix. Stomach contents are visible and may possibly be from a squid this animal ate. The matrix is fitted with a steel frame including hanging molds; also offered with two steel feet which may be inserted into the steel frame.

Ichthyosaurs are important in the field of evolutionary biology. Their fossils help demonstrate vertebrate adaptation from aquatic origins to

terrestrial life and back to aquatic existence over millions of years. Of all known reptiles, ichthyosaurs were most completely adapted to their environment, filling the same ecological niche as today's dolphin.

Arduous laboratory preparation is required to reveal fossils of this locality from within their matrix, which is of similar density to the fossils themselves. Fossils from Holzmaden, Germany are highly desired for their exceptional preservation. Also appealing is the richly colored black-brown shale matrix of this locality. Remains of animals from the warm, shallow Jurassic seas in the region now known as Germany reflect the warm environment of the Earth 180 – 170 million years ago. *Matrix measures 144 x 55in; Length of specimen measures 128 3/4 in; Skull measures 26 3/4 8in*

\$150,000 - 200,000



1120



1121

1121

ELEPHANT BIRD EGG

Aepyornis maximus
Southern Madagascar

The extinct flightless bird, *Aepyornis maximus*, produced the largest egg of any animal that ever lived, including the dinosaurs; each egg was equivalent in volume to 10-12 ostrich eggs or 160 chicken eggs. Commonly known as the elephant bird, a name that originated from Marco Polo's account of the giant bird in 1298, the species was described by Marco Polo as a ten-foot-tall bird that weighed over half a ton, having talons large enough to seize an elephant. *Aepyornis maximus* only lived on the island of Madagascar and became extinct in the middle of the 17th century. The present 20,000 – 10,000-year-old eggshell has been fastidiously reconstructed from a find in Southern Madagascar. Over sixty-five per cent of the specimen originates from one individual egg and it is composed of mainly large fragments. Shell fragments from other individuals have been painstakingly matched to restore the piece. Offered on a hand-carved wooden display stand, making for a dramatic display. *Measures 12 ½ x 9in*

\$3,000 - 4,000



1122

1122

ELEPHANT BIRD EGG

Aepornis maximus
Holocene
Madagascar

Meticulously reconstructed from sections of fossilized eggshell, an egg specimen of the prehistoric *Aepornis* represents a gigantic ostrich-like species which may have reached heights in excess of ten feet. The vast majority of *Aepornis maximus* eggs are recovered from sand dunes bordering the sea. Coastal erosion during the monsoon season may fortuitously release them from the muds in which they are found. Offered on a black Lucite stand. *Measures 11 x 8 1/8in*

\$2,000 - 3,000

To be sold without reserve



1123

1123

BIRD FEATHER FOSSIL

Unknown sp.
Eocene
Green River Formation
Lincoln County, Wyoming

A superb 3 3/8in feather from a large bird has been matted and framed. *Measures 12 x 15 1/2in*

\$1,500 - 2,000

1124

SUPERB FOSSIL SONGBIRD

Zygodactylidae sp.
Eocene
Green River Formation, Fossil Butte Member
Lincoln County, Wyoming

Fossil birds from the Green River Formation are extremely rare and this family, *Zygodactylidae*, is represented by only a very few specimens. The *Zygodactylidae* species were small, delicate perching birds which used a different foot structure for perching than living passerines. This may have allowed them to cling to tree trunks or other nearly vertical surfaces. They may have been perching songbirds, inhabiting the trees and hills surrounding Eocene Fossil Lake. The present specimen represents the positive half of this fossil. Its counterpart is on display in the Museum of Ancient life in Orem, Utah. *Specimen measures 2 ½ x 3in; Matrix measures 8 x 10in*

\$20,000 - 25,000



1124



1124 (detail)



1125



1125 (detail)



1126

1125

EXTRAORDINARY JUVENILE PTEROSAUR

Pterodactylus antiquus

Late Jurassic

Solnhofen, Germany

Pterosaurs, which belong to the order Pterosauria, were flying reptiles, not winged dinosaurs, though they co-existed with the dinosaurs until the end of the Cretaceous and became extinct at the same time. 130 valid genera, including *Pterodactylus*, are included in this order, but *Pterodactylus antiquus* is the best known. Scientific understanding of the appearance of this small flying reptile developed radically in 1998 with the discovery of soft tissue impressions on a well-preserved specimen which displayed a soft tissue crest on the back of its head, keratin sheaths on its clawed, webbed feet and hair-like fur.

The present extraordinary specimen – a juvenile - is from the famous lithographic limestone of Solnhofen, Germany. Specimen measures 2 1/4 x 3 3/8in; Matrix measures 9 3/4 x 11in

\$75,000 - 90,000

1126

THE TANKING- DAVIS PTERANODON SKULL

Pteranodon sternbergi

Late Cretaceous

Niobrara Formation, Gove County, Kansas

Possibly the finest *Pteranodon sternbergi* skull to have been discovered, this specimen has been studied intensively by Dr. Christopher Bennett, a world-renowned paleontologist at the University of Kansas. It was found on private, leased property. As is typical in specimens from the Niobrara Formation, the specimen is embedded in a mixture of natural matrix and plaster due to the friable nature of matrix in this locality. Measures 41in

This lot is accompanied by a Statement of Property Provenance and Propriety, a restoration diagram, photographs and other pertinent documents.

\$70,000 - 90,000

1127

NO LOT



1128

1128

LARGE PLATE OF SIX COMPLETE DINOSAUR FOOTPRINTS FROM CONNECTICUT

Anchisauripus minusculus, Anchisauripus sp. Triassic

Portland Formation, Connecticut

It is quite rare to find so many excellent dinosaur tracks on one plate. Produced by a bipedal theropod dinosaur (a carnivorous dinosaur with short forelimbs that walked on hind legs), *Anchisauripus* is known only by its footprints; no bone remains have been found. The present beautifully preserved dinosaur footprints are over 200 million years old. The largest print is from a rare *Anchisauripus minusculus*. Also seen is the spectacular pad and claw preservation of a 6.5-inch-long *Anchisauripus* in an impression that extends above the matrix. Adding to the rarity of the presentation are four additional complete *Anchisauripus* tracks, approximately six inches in length, which also display well-defined pads and claw details. A fascinating piece. *Matrix measures 25 x 12in*

\$2,500 - 3,250



1129



1129

1129

GROUP OF DINOSAUR VERTEBRAE

Indeterminate Species

Jurassic

Wyoming

Dinosaurs are, no doubt, the prehistoric beasts that most stimulate the popular imagination. Offered are eight dinosaur vertebrae from the same individual, along with a large vertebra from a carnivorous dinosaur measuring approximately 7 x 11 inches. *Measures 21in*

\$2,000 - 3,000

To be sold without reserve



1130

1130

LARGE BLOCK OF DUCK BILLED DINOSAUR BONES FROM A DISTINCTIVE PRIVATE COLLECTION

Edmontosaurus annectens

Cretaceous

Lance Creek Formation of Niobrara County, Wyoming

Originating from the well-known George Lee Collection, numerous bones and teeth from a single individual *Edmontosaurus annectens* are seen in this large block of matrix. The overwhelming majority of similar blocks contain remains of numerous individuals resulting from landslides and similar events that mix the bones of individual animals and even species. *Edmontosaurus* was a large, herbivorous, duck-billed dinosaur genus from the Late Cretaceous Period. A slow-moving dinosaur with few defenses, it was a biped (walking on two legs) that could also walk or run on four legs. It possessed short arms, a long, pointed tail and distinctive three-toed, hoofed feet. *Measures 22 x 17 1/2 x 5in*

From the George Lee Collection of Southern California.

\$2,500 - 3,500

1131

NORTH AMERICAN OVIRAPTOR LEG

Chirosstenotes

Cretaceous

Montana

Chirosstenotes was a carnivorous bird-like dinosaur. The oviraptorid theropod genus displayed a parrot-like head with toothless beak, long, powerful legs and long, narrow fingers. *Chirosstenotes* is theorized to have possessed feathers. It grew to approximately the size of an adult human but weighed much less than the average man. These fascinating dinosaurs lived in North America approximately 80 million years ago. The present beautifully preserved specimen is a nearly complete leg, which would distinguish any vertebrate collection. Offered on a custom metal base. Height measures 30in

\$12,000 - 14,000



1131



1132



1133



1134

1132

SPINOSAURUS CLAW--A BEAUTIFUL DINOSAUR CLAW

Suchimimus maroccanns

Cretaceous

Kem Kem Valley, Taouz, Morocco

Superb quality and excellent color

recommend this dinosaur claw from a

Suchimimus, also known as a *Spinosaurus*,

which was made famous in *Jurassic Park III*:

It was seen killing a tyrannosaur larger than

T-rex. A covetable specimen. *Measures 4 1/2in*

\$5,000 - 6,000

1133

GIANT RAPTOR HAND CLAW

Anzu wyliei

Late Cretaceous

Hell Creek Formation

Garfield County, Near Jordan, Montana

This type of claw has stumped numerous

experts for many years, but there now seems

to be consensus that they are hand claws

from a new giant raptor genus, *Anzu*

has been determined to be approximately

11 feet long, and weighed up to 700 lbs. It

was the largest North American raptor. *Anzu*

has been jokingly called the, *chicken from*

hell by paleontologists due to its very bird-

like appearance, and due to its being found

in the *Hell* Creek Formation. The present

68-65-million-year-old claw specimen,

of excellent quality, exhibits a beautiful

chocolate-brown color. It. A covetable piece

from this unusual giant raptor species.

Measures 3 inches along the curve; Straight-

line length measures 2 5/8 inches

\$5,000 - 6,000

1134

EXCEPTIONALLY RARE ALLOSAURUS FOOT CLAW

Allosaurus

Late Jurassic

Morrison Formation, Skull Creek Quarries,

Moffat County, Colorado

Far more rare than dinosaur teeth, which

replaced themselves, are dinosaur claws.

Allosaurus possessed large hands with huge

claws (one giant claw and two smaller, yet still

deadly, claws per hand.) Its arms were strong

enough to pick up a Volkswagen, so it could

literally disembowel its prey with one swipe of

its massive hands.

The present specimen is a fine example of a

complete foot, or pes, claw from a medium-

sized *Allosaurus*. It displays the rich ebony

color characteristic of this site.

Length measures 3in

\$4,000 - 5,000

1135

GIANT CARNIVEROUS DINOSAUR CLAW

Allosaurus fragilis

Late Jurassic

Morrison Formation, Wyoming

A magnificent example of an extremely rare dinosaur fossil, this formidable dinosaur claw gives testament to the carnivorous habit of *Allosaurus*. Each *Allosaurus* had only two of these giant hand claws, along with four smaller hand claws. The present specimen, measuring over eight inches on the curve, is completely original without any restoration.

Measures 6 3/4in

\$8,000 - 12,000



1135

1136

FINE DIPLODOCUS TOOTH

Diplodocus longus

Late Jurassic, Morrison Formation

Bone Cabin Quarry, Carbon County, Wyoming

Among the longest land animals of all time, *Diplodocus* consumed a tremendous amount of plant material daily in order to support a body measuring approximately 90 feet (27 meters) in length. Its peg-shaped teeth are among the most unusual of any plant-eating dinosaur. Biomechanical experts believe that the peg teeth, which were pointed forward, acted as a stripping mechanism, with the upper teeth forming a grate-like structure with the lower teeth, which would have effectively removed all of the soft leaves as the dinosaur pulled its mouth across a branch during feeding. The present tooth specimen is a fine enamel crown with an interesting ebony toned, granular-textured surface. Measures 1 15/16in

\$2,500 - 3,200



1136

1137

**VERY RARE ALLOSAURUS
PREMAXILLARY TOOTH**

Allosaurus fragilis

Late Jurassic

Morrison Formation, Skull Creek Quarries,
Moffat County, Colorado

The top predator of the Jurassic and a distant cousin of *Tyrannosaurus rex*, *Allosaurus* may very well have been more ferocious and deadlier than *T. rex*. *Allosaurus* had much better anchored teeth than *T. rex*; *Allosaurus* tooth roots are much longer and stronger than those of a comparably sized *T. rex*, indicating that it was an active and violent hunter, slashing and tearing at its prey with its mouth. The present tooth specimen exhibits a gorgeous natural lustrous ebony color on the enamel and a black mottled root with whitish checking. The blade (the enamel portion of the tooth with serrations for cutting flesh) measures 1 3/4 inches. This tooth displays a D-shaped cross section meaning that it originated from the premaxillary of the upper jaw. There are only ten premaxillary teeth in an entire skull; therefore premaxillary teeth are far more rare than any other type of tooth in the fossil record. *Allosaurus* teeth in as excellent condition as this example are exceptionally rare.

\$5,500 - 6,500



1137



1138

1138
EXCELLENT TOOTH OF A GIANT PLANT EATING DINOSAUR

Camarasaurus supremus
Late Jurassic
Morrison Formation
Skull Creek Quarries, Moffat County, Colorado
Though smaller than its sauropod contemporaries, *Camarasaurus* measured up to sixty-five feet (twenty meters) in length and weighed up to twenty tons. Its long, thick, spoon-shaped teeth aided its daily ingestion of tons of plant material, such as fern leaves and conifers. The present *Camarasaurus* tooth specimen was recovered at Skull Creek Quarries in Moffat County, Colorado, which were discovered in the 1970's by the late Robert Witherell of Dinosaur, Colorado. The present offering, a beautiful, ebony colored tooth with a partial root, was originally collected by Bob Witherell himself, before his untimely death in 1999.
Length measures 3 1/2in
\$4,000 - 5,000



1139

1139
COMPLETE ALLOSAURUS MAXILLARY TOOTH

Allosaurus
Late Jurassic
Morrison Formation, Skull Creek Quarries, Moffat County, Colorado
Teeth with 100% complete roots are exceptionally rare. The present specimen exhibits the gorgeous lustrous ebony enamel characteristic of its locality. One of the most famous of all dinosaurs, *Allosaurus* is thought to have hunted in packs. This dinosaur species had two small horns, and eyes on the sides of its narrow skull, which indicates that they did not have the same degree of binocular vision as *T. rex*. *Allosaurus* hunted dinosaurs smaller than itself, for example, *Camptosaurus* and *Othnielia*, and there is evidence to suggest it also fed on the giant sauropods, *Diplodocus*, *Pleurocoelus*, and *Camarasaurus*.
Length measures 3 3/4in
\$5,000 - 6,500



1140

1140
VERY ROBUST POSTERIOR TOOTH OF TYRANNOSAURUS REX

Tyrannosaurus rex
Late Cretaceous
Hell Creek Formation, Harding County, South Dakota
The adult *Tyrannosaurus rex* possessed teeth in a variety of sizes at any given time, as teeth were broken and new ones grew as replacements. Using its massive jaws and characteristic conical teeth, *T. rex* could consume up to five hundred pounds of meat and bones in one bite. The short, massive shape of the present specimen indicates that it originated in the rear portion of the mouth. Considering its size, it most likely came from a huge animal of nearly maximum size for the species. The tooth exhibits a very attractive lustrous brown color with whitish checking caused by stomach acid after being swallowed in combat or a feeding frenzy. There is a wear-facet on the posterior edge likely caused by chipping of the tooth during aggressive use, which was gradually smoothed-over by continual use masticating the very abrasive diet of bones and sinew.
Length measures 2 1/2in
\$5,500 - 6,500

1141
EXTREMELY RARE TORVOSAURUS TOOTH

Torvosaurus tanneri
Late Jurassic
Morrison Formation
near Tensleep, Wyoming
Torvosaurus was very likely the largest carnivorous alive during the Jurassic Period. It was a powerful bipedal predator with massive legs and tail, a strong s-shaped neck and a robust body. Like *T. rex*, it had short arms and sharp claws. The present superb tooth specimen, from a posterior (rear) position in the maxillary (upper set of teeth) of the skull, is a very pleasing and highly lustrous dark chocolate-brown color. Length measures 1 7/8in
\$5,000 - 6,000

1142
SPECTACULAR TYRANNOSAURUS REX TOOTH

Tyrannosaurus rex
Cretaceous
Hell Creek Formation, Montana
Boasting an excellent tip and numerous intact serrations, this amazing *Tyrannosaurus rex* tooth is completely original, with no restoration. The minor wear seen on the tip occurred during the life of the individual, as it fed. Rather thick in shape, with the sharp, squared serrations definitive of *T. rex* teeth, the tooth is solid, displaying no crack repair as is typically seen in specimens of this kind. The vast majority of *T. rex* teeth are shed teeth, as is this specimen. The impressive and rare tooth was found in an ancient river or lakebed on a private ranch in the 67-65-million-year-old Hell Creek Formation of Montana. All *T. rex* teeth are in great demand, but those very few that are unrestored and intact, and which boast original tips, are rarely encountered. Measures 2 1/2in
\$6,000 - 8,000

1143

LARGE TYRANNOSAURUS REX TOOTH

Tyrannosaurus rex

Late Cretaceous, Hell Creek Formation, Montana

Tyrannosaurus rex fossils are found all over the Western United States with Montana being known for their numerous T-rex skeletons recovered there in the past 100 years. A wonderful tooth recovered from the Eastern Montana Badlands of the Hell Creek Formation this past summer. This robust tooth boasts super serrations and brown enamel on a crown with only very minimal crack restoration needed.

Measures 3 7/8in

\$12,500 - 16,500



1141



1142

1144

EXCEPTIONALLY LARGE TYRANNOSAURUS REX TOOTH

Tyrannosaurus rex

Late Cretaceous

Hell Creek Formation, Harding County, South Dakota

No creature in history holds the degree of blood-curdling cachet as the *Lizard King*, *Tyrannosaurus rex*--one of the most awe-inspiring creatures that ever inhabited Earth. *T. rex* displayed the greatest biting force of any large theropod. Some scientists theorize that the great jaw strength was an evolutionary adaptation to its unique *gape-jawed* collision hunting style, referring to violent attacks that *T. rex* is thought to have initiated by slamming into its prey, mouth-first, at high speed. *T. rex* teeth were very robust so that they would more effectively transmit the energy of impact into the victim's body and gouge, rather than cut, huge chunks of flesh out of the prey. The present offering is a very large tooth of nearly maximum crown size (the crown is the enamel portion of the tooth) displaying a beautiful chocolate-brown tip grading into a cream base. There is an interesting wear facet at the tip where this tooth occluded with the teeth in the opposite jawbone. This lot represents a rare opportunity for a private collector to own an extraordinary example of one of the most exciting parts of the world's best-known dinosaur--its famously formidable teeth.

Length measures 4in

\$12,000 - 15,000



1143



1144



1145 (detail)

1145

INCOMPARABLE ORNITHOPOD SKELETON

Thescelosaurus sp.

Late Cretaceous

Hell Creek Formation, Harding County, South Dakota

One of the last survivors of the Age of Dinosaurs, *Thescelosaurus* first appeared at the very end of the Late Cretaceous Period. This ornithomimid (bipedal ornithischian dinosaur) is known from several partial skeletons and skulls. It possessed sturdy hind limbs, small wide hands and a head with an elongated pointed snout. The structure of its teeth and jaws suggest a primarily herbivorous habit. The present impressive specimen leaves no doubt as to why the name *Thescelosaurus*, meaning *godlike, marvelous or wondrous*, was given to this species. With approximately 85% of the original skeleton represented, this is possibly one of the most complete examples of this genus known. The skeleton has been mounted on a custom metal armature attached to a hardwood base. *Length approximately 9 feet*
\$275,000 - 325,000



1145



1146

1146

AMETHYST ROSE

Brazil

A textbook example of this form, known in the mineral hobby as a "rose", having a dazzling array of conjoined, radiating lustrous crystals with particularly strong violet hues towards the center.

Measuring 8 x 7 x 3in

\$1,500 - 2,500

To be sold without reserve

1147

AGATE AND AMETHYST GEODE SPHERE

Brazil

A specimen taken from the center of a geode, carved and polished into a decorative sphere. Gray banded agate can be seen with a central vug lined with rich purple amethyst crystals. *Diameter 6 1/2 in*

\$1,000 - 1,500

To be sold without reserve

1148

TWO AQUAMARINE CRYSTALS ON MUSCOVITE

Pakistan

A classic plate featuring mineral associates having two large, lustrous blue crystals of aquamarine, *measuring up to 2 1/4 inches in length*, (later) placed into a bed of muscovite mica.

Measuring 8 1/2 x 6 x 3 1/2 in

\$1,500 - 2,500

To be sold without reserve

1149

LARGE DECORATIVE APOPHYLLITE AND STILBITE

Poona, India

A fine, large decorative display specimen with numerous colorless and pale green apophyllite crystals intergrown with orange-peach stilbites.

Measures 28 x 15 in

\$2,000 - 3,000

Offered on a custom-fitted acrylic base.

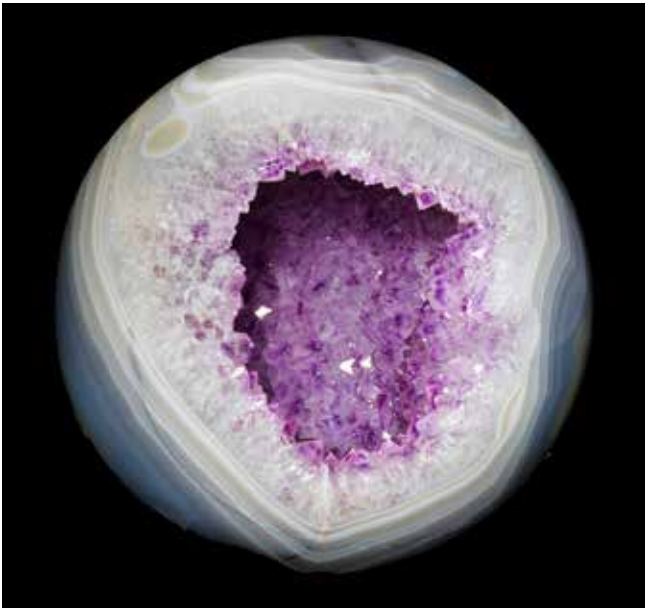
1150

GROUP OF FOUR INDIAN MINERALS

Including a white stilbite "bowtie" with associated orange stilbite crystals, *Poona, India, length 4in*; a glassy, near-colorless apophyllite and stilbite, *length 6in*; an orange stilbite with near-colorless apophyllite, *length 5 in*; and a tube lined with numerous globular Okenite crystals, *Bombay Quarry, Mumbai District, Maharashtra, India, length 5 in (4)*

\$1,000 - 1,500

To be sold without reserve



1147



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1150





1151

1151

LARGE AND IMPRESSIVE GREEN FLUORITE SPECIMEN

Orange River, Warmbad, Karasburg District, Karas Region, Namibia
Dozens of crystals cover the entire surface of this very large decorative plate which has individual crystals measuring up to 1 1/2 inches along the edge. *Measures 15 x 10 x 4 in*

\$2,000 - 3,000



1152

1152

PURPLE FLUORITE WITH CALCITE AND SPHALERITE

Elmwood Mine, Smith County, Tennessee

A classic mineral association consisting of a large purple fluorite of complex cubic form with lustrous golden yellow calcite presenting a color contrast, and sphalerite at the base. *Measuring 9 1/2 x 7 x 6 1/2 in*

\$2,500 - 3,500

To be sold without reserve

1153

GROUP OF FIVE DECORATIVE MINERALS

Including a lepidolite cluster, *Madagascar, height 11 in*; a large green tourmaline in lepidolite and matrix, *Brazil, on a wooden base, height 7 1/2 in*; a citrine plate, *Brazil, height 9in*; a small kyanite cluster, *Brazil, height 5 in*; and a vivianite in matrix, *Brazil, height 3in. (5)*

\$1,000 - 1,500

To be sold without reserve

1154

LARGE POLISHED LAPIS FREEFORM

Afghanistan

Capable of standing on its own, this free-form sculptural boulder of lapis lazuli has gem-grade faces with some evidence of calcite banding on the sides. Contour polished to bring out the beauty of the blue saturation. *Weighing 32 lbs (14.5 kilos). Measures 15 x 11 x 3 in*

\$2,000 - 3,000

1155

RARE CHATOYANT MALACHITE STALACTITE

Democratic Republic of Congo

The present specimen is a highly unusual offering: rarely seen in its present form, it has been retained as a complete stalactite, its external surface features merely polished away to reveal the exceptionally bright coloration of vivid blues and greens to the interior. The chatoyancy is seen when looking at the ends of the specimen - the slightest movement reveals a movable cat's eye effect which shimmers. *Measures 8 x 3 1/2 x 4 in*

\$3,000 - 4,000



1153



1154



1155



1155 (detail)



1156



1157

1156

MALACHITE PSEUDOMORPH AFTER AZURITE

Morocco

A large cabinet-sized specimen having an excellent horizon line and mound formation, with a thick carpet of bladed azurite crystals replaced by malachite. *Measuring 8 x 6 x 2 1/2 in*

\$1,500 - 2,000

To be sold without reserve

1157

PYROMORPHITE

Ya Suo Mine, Guanxin Xia Province, China

A mid-sized cabinet specimen of classic mound formation with an excellent horizon line and a lush covering of vibrant, chartreuse green crystals over the surface. *Measuring 6 1/2 x 5 x 3 in*

\$2,500 - 3,500

To be sold without reserve



1158

1158

GROUP OF EIGHT PYRITE OR CHALCOPYRITE SPECIMENS

Including a polished Chalcopyrite point, *Bahia, Brazil, height 9 1/2 in*; cubic pyrite crystals on matrix, *Navajun, Spain, height 6 in*; and a small polished pyrite sphere, *diameter 2 1/4 in*; a large concretion with pyrite crystallization, *Yunnan, China, length 9 in*; a chalcopyrite concretion, *Siberia*, and three others. (8)

\$1,200 - 1,500

To be sold without reserve

1159

LARGE PYRITE CLUSTER

Racracancha Mine, Tinyahuarco District, Pasco Province, Pasco Department, Peru

A classic specimen of well-formed cluster of cubic pyrite crystals of large size: the largest cube measuring 4.5 cm along the edge. The luster is excellent and mirror-bright. *Measures 11 x 8 x 5 in*

\$2,500 - 3,500

Offered on a custom-fitted acrylic base.

1160

SEPTARIAN NODULE SPLIT

Madagascar

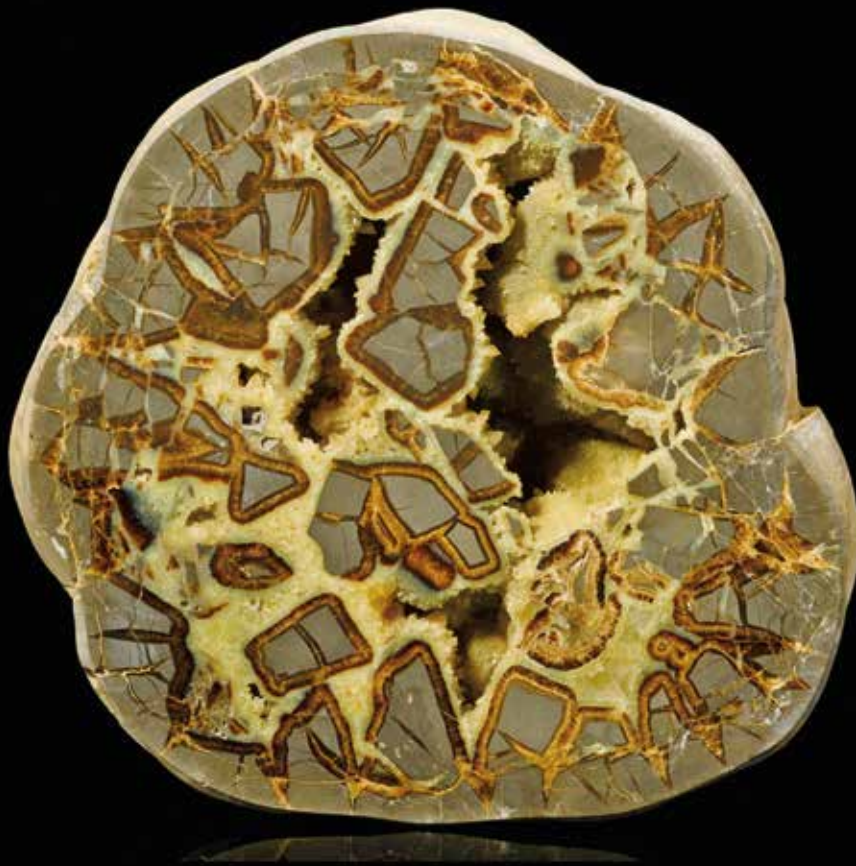
Calcite, aragonite and limestone are the three primary components of this decorative stone, produced over 50 million years ago by nature's amazing forces. The present specimen is a half of a geode, displaying a polished face, while the reverse side still retains the natural surface of the boulder. *Measuring 9 x 9 x 4 in*

\$800 - 1,200

To be sold without reserve



1159



1160



1161

1161

SAND SELENITE--"DESERT ROSE" AND A CALCITE

A large, impressive specimen of Sand Selenite, known in the mineral hobby as a "Desert Rose", *Karas Region, Namibia, height 12 in, on a custom-fitted wooden base*; together with a large bladed calcite specimen, *Guizhou, China, measuring 12 x 12 x 2 1/2 in.* (2)

\$1,000 - 1,500

To be sold without reserve

Sand Selenite Provenance: Ex. Brice and Christophe Gobin Collection

1162

VERY LARGE SCHORL AND A LARGE MUSCOVITE MICA

Of imposing size, this large, Brazilian lustrous black tourmaline, known as schorl, *weighing 57.2 lbs (25.9 kilos), measures 13 x 7 1/2 x 7 in*; together with a very large bladed Muscovite mica, *Pakistan, height 10 in.* (2)

\$1,000 - 1,500

To be sold without reserve

1163

GROUP OF MINERALS FROM WORLD LOCALITIES

Including a native antimony, *Uranium Mine #21, Pribram-Haje, Central Bohemia, Czech Republic, with a label stating that the specimen is from the private collection of Vasil Pjexcak, Director of the Silver and Uranium Mines of Pribram, length 4in*; together with a calcite with pyrite micro-crystalline overgrowth, *China, length 5in*; also including a calcite "pincushion", *China, height 5in*; an epidote, *Pakistan, length 5 in*; a manganooan calcite, *China, length 6 in*; and two agatized coral specimens, *Florida.* (7)

\$1,000 - 2,000

To be sold without reserve



1162

1164

IMPRESSIVE QUARTZ CRYSTAL CLUSTER

Ron Coleman Mines, Hot Springs, Arkansas
Geologists view Arkansas quartz as some of the finest quality quartz in the world. This is an excellent large display specimen from the most renowned quarry, the Ron Coleman mines. Its well-defined points vary from a translucent base to transparent well-defined terminations. For three generations the Colemans have been mining quartz and supplying many of the world's top designers with quality specimens. *Measuring 20 x 18 x 10 in*

\$2,500 - 3,500

To be sold without reserve

1165

ROCK CRYSTAL SKULL WITH TOURMALINE INCLUSIONS

Fine translucent quartz from Brazil with an array of tourmaline crystal inclusions has been masterfully carved into a life size human skull, with correct anatomical proportions and dimensions. An excellent offering for the collector of metaphysical specimens and skulls: when illuminated from below or behind, the skull is enlivened with the veils and satins which appear. *Measures approximately 9 x 7 x 5 inches*

\$4,000 - 6,000



1163

1166

ROCK CRYSTAL QUARTZ SPHERE

Brazil
Perplexing legends and mythological folklore have been told about the magical crystal ball. It is believed that the past, present and even the future can be seen by gazing into this mesmerizing sphere. The present specimen is a true crystal ball cut from the highest quality Brazilian quartz, polished to a brilliant finish. With only the most minor of inclusions, this is nearly an optical grade sphere of rock crystal quartz--rare indeed for the quartz species. *Diameter 3 1/4 in*

\$1,000 - 1,500

To be sold without reserve



1164



1165



1166



1167

1167

GROUP OF EIGHTEEN MINERALS FROM WORLD LOCALITIES

Including a garnet in matrix, *China*; Szczenicsite crystals on matrix, *Jardineria Mine, 5km, East of Inca del Oro, Atacama Province, Chile, length 4 in*; a copper nugget, *White Pine Mine, Michigan, height 7 in*; an Ajoite in Quartz, *South Africa, length 6in*; an azurite crystal cluster, *Morocco*; Moldavite, *Czech Republic, length 2 in*; yellow fluorite, *China*; a native copper, *length 4 in*; and a Chinese stibnite with overgrowth, *height 16 in. (18)*

\$1,500 - 2,500

To be sold without reserve

1168

IMPRESSIVE RUTILATED SMOKY QUARTZ

Brazil

An elegant, showy display specimen possessing two polished faces, the reverse side with natural crystal surfaces. Distinguished by a rich brown color and innumerable golden rutile needles. *Height 14 in*

\$1,500 - 2,500

To be sold without reserve

Offered on a custom-fitted wooden base.



1168

1169

GROUP OF NINETEEN MINERALS FROM WORLDWIDE LOCALITIES

Including a large quartz crystal with schorl tourmaline crystal inclusions, *Minas Gerais, Brazil, length 7 1/2 in*; another quartz crystal with bluish-green tourmaline inclusions, *Brazil, length 7in*; a calcite, *length 6in*; aragonite, from the type locality, *Moina de Aragon, Guadalajara Province, Spain, with label, length 4in*; a plate of sturmanite crystals, *N'Chwaning II Mine, Black Rock, South Africa, length 10in*; a Kaersutite, *Korath Range, Ethiopia, length 1 1/2 in*; a barite, *length 4 in*; velvet malachite, *Congo, length 3 1/2 in*; Wendewilsonite crystals on matrix, *Bou-Azzer, Anti-Atlas Mountains, Morocco, collected in the late 1970s from the type locality, with label, length 2 1/2 in*; an azurite vug, *Morocco, length 6in*; a crocoite, *Tasmania, length 8in*; Chrysocolla on Heterogenite, *Lubumbashi, Katanga (Shaba) Province, Democratic Republic of the Congo (Zaire), with label; length 7 in*; a calcite rose with pyrite crystals, *Guizhou, China, with Brice and Christophe Gobin, with label, length 3in*; chrysocolla, *Congo, length 7 1/2 in. (19)*

\$2,000 - 3,000

To be sold without reserve

1170

MISCELLANEOUS COLLECTION OF ELEVEN MINERAL SPHERES AND EGG-FORM CARVINGS

Including a rhodochrosite sphere, *diameter 1 3/4 in*; a sandstone sphere, *Kanab, Utah, diameter 5in*; tiger's eye quartz sphere, *diameter 2in*, a rutilated quartz egg, *height 2 1/4in*; an another smaller, *height 1 3/4in*; an Ocean Jasper egg, *height 2 1/2 in*; a charoite egg, *height 2 1/2 in*; and opal in matrix sphere, *Oregon, diameter 2 1/2 in*; a ruby in zoisite egg, *Tanzania, height 3 1/2 in. (11)*

\$1,000 - 1,500

To be sold without reserve



1169



1170



1171

1171

LARGE COLLECTION OF MINERAL SPHERES

Worldwide Localities

Including stromatolite, orbicular jasper, carnelian, septarian, volcanic glass, lace agate, lapis, pyrite, tiger iron matrix, onyx, fluorite, sugilite, moss agate, fossil coral, rock crystal quartz, serpentine, bauxite, blue calcite, malachite, rainbow obsidian, rutilated quartz, selenite, green fluorite. (approx. 55)

\$1,500 - 2,000

1172

EXCELLENT PETRIFIED WOOD TABLE

Chinle Formation, near Holbrook, Arizona

Triassic period, 218 million years old

This appealing and functional table incorporates a large, *diameter 22in*, cross-section slab of Arizona petrified wood of particularly great thickness of 2 inches. It displays the most desirable colors for which wood from this locality is known: reds, browns, grays, whites and with a speckling of black dendrites. Raised on a custom steel base having a contemporary acid-etch finish, this table would easily enhance any corporate or residential interior. *Height 32"*

\$3,000 - 4,000

END OF SALE



1172

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