

Palaemonetes cummingi is a very rare species, with no more than a dozen collections (Chace 1954, Dobkin 1971, Franz 1994b) recorded between its discovery in 1953 (Chace 1954) and last observation in 1973 (Franz 1994b). All collections and observations occurred at Squirrel Chimney Cave (Franz 1994a). Squirrel Chimney Cave is a partially water-filled, solution cavity located on private land near Gainesville, Alachua County, Florida (Franz 1994a). Surveys to confirm the species continued existence at Squirrel Chimney Cave (Morris and Butt 1992, Franz 1994b) and to locate specimens at other nearby underground sites (Franz et al. 1994) were unsuccessful. We listed *P. cummingi* as a threatened species on June 21, 1990 (55 FR 25588).

The petition contends that the failure to locate the species during a two-year (1994–1996) status survey, supports its removal from the List of Endangered and Threatened Wildlife. The status survey included Squirrel Chimney and four additional underground aquatic sites (Doonan 1997). Except for a 2.5 meter (8 foot) drop in water level, physical conditions at Squirrel Chimney remained relatively unchanged since Hobbs (1942) discovered the site in the early 1940's. Chemical analysis of water samples revealed good overall water quality. The survey confirmed the continued presence of redeye chub (*Notropis harperi*) in Squirrel Chimney Cave. Morris and Butt (1992) first documented this small, predatory fish within that locality. Its presence may be the result of a natural colonization through underwater passageways linked to other underground sites. Since the chub is capable in lab situations of eating other crustacea the size of *Palaemonetes cummingi* larvae (L. Straub, U.S. Geological Survey, Biological Resources Division, pers. comm., 1997, in Doonan 1997), the survey report suggested that this fish may be responsible for the apparent absence of the shrimp from Squirrel Chimney Cave. Based on survey results and analyses, the GFC report indicated that *P. cummingi* may be extinct. The GFC acknowledges that this assessment is not conclusive, because it only surveyed a small percentage of potential habitat and it omitted two high priority sites from its survey.

We have reviewed the petition, its supporting information, information in our files, other available literature, and consulted with species and habitat experts. Using the best scientific and commercial information available, we find that the petition does not present substantial information indicating that

delisting this species due to extinction may be warranted.

We base our finding on the inadequacy of existing information on the Squirrel Chimney cave shrimp and its habitat. The GFC status survey does not include a number of underground sites the GFC rated as ecologically similar to and within about 8 kilometers (5 miles) of Squirrel Chimney. These sites are part of the Newberry Limestone Plain and characteristic of the karst (limestone) topography of that area (Williams et al. 1977). Connections among underground features occur frequently in karst topography (Doonan 1997). The emergence of redeye chub in Squirrel Chimney and its presence at other nearby underground sites suggest that fissures found at Squirrel Chimney actually may represent underwater connections to those other sites (Doonan 1997). Such passageways may shelter Squirrel Chimney cave shrimp and also provide for their dispersal. In addition, the extreme rarity of *P. cummingi* and lack of life history information suggest that its detection requires extensive sampling (N. Burkhead, U.S. Geological Survey, in litt. 1997). We believe the number of visual and trap samples taken during the GFC survey at sites other than Squirrel Chimney were too small to provide an accurate assessment of the species' status at those sites.

We continue to seek new information on the Squirrel Chimney cave shrimp's biology, ecology, distribution, and habitat, as well as threats to its survival. Such information will enable us to work with the GFC to correctly assess the species' status and make the best recommendations and decisions regarding its conservation, recovery, and possible reclassification. We encourage interested parties to send any comments, data, or other information involving *P. cummingi* and its habitat to our Jacksonville Field Office listed in the ADDRESSES section of this notice.

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Author: The primary author of this document is John F. Milio, Jacksonville Field Office (see ADDRESSES section).

Authority

The authority for this action is the Endangered Species Act (16 U.S.C. 1531 et seq.).

Dated: November 25, 1998.

Jamie Rappaport Clark,

Director, Fish and Wildlife Service.

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DEPARTMENT OF INTERIOR

Fish and Wildlife Service

50 CFR Part 20

RIN 1018–AE38

Migratory Bird Hunting; Temporary Conditional Approval of Tungsten-Matrix Shot as Nontoxic for the 1998–99 Season

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) amends Section 20.21(j) to grant temporary conditional approval of tungsten-matrix shot as nontoxic for the 1998–99 migratory bird hunting season only, except in the Yukon-Kuskokwim (Y–K) Delta, Alaska, while chronic toxicity/reproductive testing is being completed. Tungsten-matrix shot has been submitted for consideration as nontoxic by Kent

Cartridge Manufacturing Company, Ltd. (Kent), of Kearneysville, West Virginia.

DATES: This rule takes effect immediately upon publication on December 8, 1998.

ADDRESSES: Copies of the EA are available by writing to the Chief, Office of Migratory Bird Management (MBMO), U.S. Fish and Wildlife Service, 1849 C Street, NW., ms 634-ARLSQ, Washington, DC 20240. The public may inspect comments during normal business hours in room 634, Arlington Square Building, 4401 N. Fairfax Drive, Arlington, Virginia.

FOR FURTHER INFORMATION CONTACT: Robert J. Blohm, Acting Chief, or James R. Kelley, Jr., Wildlife Biologist, Office of Migratory Bird Management (MBMO), (703) 358-1714.

SUPPLEMENTARY INFORMATION: Since the mid-1970s, the Service has sought to identify shot that does not pose a significant toxic hazard to migratory birds or other wildlife. Currently, only steel and bismuth-tin shot are approved by the Service as nontoxic. On October 7, 1998 tungsten-iron (63 FR 54015) and tungsten-polymer (63 FR 54021) shot were given temporary conditional approval for the 1998-99 hunting season. Compliance with the use of nontoxic shot has increased over the last few years. The Service believes that this level of compliance will continue to increase with the availability and approval of other nontoxic shot types. The Service is eager to consider these other materials for approval as nontoxic shot.

The revised procedures for approving nontoxic shot (50 CFR 20.134) consist of a three-tier process whereby existing information can minimize the need for full testing of a candidate shot. However, applicants still carry the burden of proving that the candidate shot is nontoxic. By developing the new approval procedure, it was the Service's intent to discontinue the practice of granting temporary conditional approval to candidate shot material. However, the application by Kent was initiated prior to implementation of the new protocol. To date, scientific information presented in the application suggests that tungsten-matrix is nontoxic under conditions for the proposed shot configuration. Therefore, the Service will grant temporary conditional approval for the 1998-99 hunting season only. Final approval will not be granted until chronic toxicity/reproductive testing is successfully completed and the results are reviewed and approved by the Director.

Kent's original candidate shot was fabricated from what is described in

their application as "a mixture of powdered metals in a plastic matrix whose density is comparable to that of lead. All component metals are present as elements, not compounds. Tungsten-matrix pellets have specific gravity of 9.8 g/cm³ and is composed of 88 percent tungsten, 4 percent nickel, 2 percent iron, 1 percent copper, and 5 percent polymers by mass" (63 FR 30044; June 2, 1998). After consultation with the Service, Kent subsequently changed the composition of their shot and removed several metal components. The new shot material being considered has a density of 10.7 g/cm³ and is composed of approximately 95.9 percent tungsten and 4.1 percent polymers.

Kent's updated application includes a description of the reformulated tungsten-matrix shot, a toxicological report (Thomas 1997), and results of a 30-day dosing study of the toxicity of the original formulation in game-farm mallards (Wildlife International, Ltd. 1998). The toxicological report incorporates toxicity information (a synopsis of acute and chronic toxicity data for mammals and birds, potential for environmental concern, and toxicity to aquatic and terrestrial invertebrates, amphibians and reptiles) and information on environmental fate and transport. The toxicity study is a 30-day dosing test to determine if the original candidate shot poses any deleterious effects to game-farm mallards. This will meet the requirements for Tier 2, as described in 50 CFR 20.134(b)(3). Because the re-formulated shot contains no new components, and in fact has had components removed, the Service determined that testing of the reformulated shot in the form of a new 30-day dosing study was not necessary.

Toxicity Information: There is considerable difference in the toxicity of soluble and insoluble compounds of tungsten. Elemental tungsten, which is the material used in this shot, is virtually insoluble and is therefore expected to be relatively nontoxic. Even though most toxicity tests reviewed were based on soluble tungsten compounds rather than elemental tungsten (while the toxicity of the polymers is negligible due to its insolubility), there appears to be no basis for concern of toxicity to wildlife for tungsten-matrix shot (metallic tungsten and polymers) via ingestion by fish, birds, or mammals (Wildlife International Ltd., 1998; Bursian et al., 1996; Gigiema, 1983; Patty, 1981; Industrial Medicine 1946; Karantassis 1924).

Environmental Fate and Transport: Tungsten is insoluble in water and, therefore, not mobile in hypergenic

environments. Tungsten is very stable in acids and does not easily complex. Preferential uptake by plants in acid soil suggests that uptake of tungsten in the anionic form is associated with tungsten minerals rather than elemental tungsten (Kabata-Pendias and Pendias 1984).

Environmental Concentrations:

Calculation of the estimated environmental concentration (EEC) of tungsten in a terrestrial ecosystem is based on 69,000 shot per hectare (Pain 1990), assuming complete erosion of material in 5 cm of soil. The EECs for tungsten and the 2 polymers in soil are 25.7 mg/kg, 4.2 mg/kg, and 0.14 mg/kg, respectively. Calculation of the EEC in an aquatic ecosystem assumes complete erosion of the shot in one cubic foot of water. The EECs in water for tungsten and the 2 polymers are 4.2 mg/L, 0.2 mg/L, and 0.02 mg/L, respectively. Tungsten-matrix shot is considered insoluble and is stable in basic, neutral, and mildly acidic environments. Therefore, erosion of shot is expected to be minimal, and adverse effects on biota are not expected to occur.

Effects on Birds: An extensive literature review provided information on the toxicity of elemental tungsten to waterfowl and other birds. Ringelman et al. (1993), orally dosed 20 8-week-old game-farm mallards with 12-17 (1.03g) tungsten-bismuth-tin (TBT) pellets and monitored them for 32 days for evidence of intoxication. No birds died during the trial, gross lesions were not observed during the postmortem examination, histopathological examinations did not reveal any evidence of toxicity or tissue damage, and tungsten was not detectable in kidney or liver samples. The authors concluded that TBT shot presented virtually no potential for acute intoxication in mallards.

Kraabel et al. (1996) assessed the effects of embedded TBT shot on mallards and concluded that TBT was not acutely toxic when implanted in muscle tissue. Inflammatory reactions to TBT shot were localized and had no detectable systemic effects on mallard health.

Nell et al. (1981) fed laying hens (*Gallus domesticus*) 0.4 or 1 g/kg tungsten in a commercial mash for five months to assess reproductive performance. Weekly egg production was normal and hatchability of fertile eggs was not affected. Exposure of chickens to large doses of tungsten either through injection or by feeding, resulted in an increased tissue concentration of tungsten and a decreased concentration of molybdenum (Nell et al. 1981). The loss of tungsten from the liver occurred in an exponential manner with a half-life of

27 hours. The alterations in molybdenum metabolism seemed to be associated with tungsten intake rather than molybdenum deficiency. Death due to tungsten occurred when tissue concentrations increased to 25 mg/g liver. At that concentration, xanthine dehydrogenase activity was zero.

The two plastic polymers used in tungsten-matrix shot act as a physical matrix in which the tungsten is distributed as ionically-bound fine particles. Most completely polymerized nylon materials are physiologically inert, regardless of the toxicity of the monomer from which they are made (Peterson, 1977). A literature review did not reveal studies in which either of the two polymers were evaluated for toxicity in birds. Montgomery (1982) reported that feeding Nylon 6 to rats at a level of 25 percent of the diet for 2 weeks caused a slower rate of weight gain, presumably due to a decrease in food consumption and feed efficiency. However, the rats suffered no anatomic injuries due to the consumption of nylon.

Kent's 30-day dosing study on the original formulation (Wildlife International Ltd., 1998) included 4 treatment and 1 control group of game-farm mallards. Treatment groups were exposed to 1 of 3 different types of shot: 8 #4 steel, 8 #4 lead, or 8 #4 tungsten-matrix; whereas the control group received no shot. The 2 tungsten-matrix treatment groups (1 group deficient diet, 1 group balanced diet) each consisted of 16 birds (8 males and 8 females); whereas remaining treatment and control groups consisted of 6 birds each (3 males and 3 females). All tungsten-matrix-dosed birds survived the test and showed no overt signs of toxicity or treatment-related effects on body weight. There were no differences in hematocrit or hemoglobin concentration between the tungsten-matrix treatment group and either the steel shot or control groups. No histopathological lesions were found during gross necropsy. In general, no adverse effects were seen in mallards given 8 #4 size tungsten-matrix shot and monitored over a 30-day period. Tungsten was found to be below the limit of detection in all samples of femur, gonad, liver, and kidney from treatment groups.

Based on the results of the toxicological report and the toxicity test of the original shot formulation (Tier 1 and 2), the Service concludes that tungsten-matrix shot, (approximately 95.9 percent tungsten and 4.1 percent polymer, by weight with <1 percent residual lead), does not appear to pose a significant danger to migratory birds or other wildlife and their habitats.

However, the Service has some concern that absorption of tungsten into the femur, kidney, and liver, as noted in a separate study on mallards, could potentially affect the spectacled eider (*Somateria fischeri*); a species already subject to adverse weather, predation, and lead poisoning on the Yukon-Kuskokwim (Y-K) Delta, Alaska. Until chronic toxicity/reproductive testing has been successfully completed and the Service has reviewed and approved the results, tungsten-matrix shot cannot be approved for the Y-K Delta.

The first condition of approval is toxicity testing. Candidate materials not approved under Tier 1 and/or 2 testing are subjected to standards of Tier 3 testing. The scope of Tier 3 includes chronic exposure under adverse environmental conditions and effects on reproduction in game-farm mallards, as outlined in 50 CFR 20.134 (b)(4)(i)(A and B) (Tier 3), and in consultation with the Service's Office of Migratory Bird Management and the U.S. Geological Survey's Division of Biological Resources. This study includes assessment of long-term toxicity under depressed temperature conditions using a nutritionally-deficient diet, as well as a moderately long-term study that includes reproductive assessment. The tests require the applicant to demonstrate that tungsten-matrix shot is nontoxic to waterfowl and their offspring.

The second condition of final unconditional approval is testing for residual lead levels. Any tungsten-matrix shot with lead levels equal to or exceeding 1 percent will be considered toxic and, therefore, illegal. In the **Federal Register** of August 18, 1995 (60 FR 43314), the Service indicated that it would establish a maximum level for residual lead. The Service has determined that the maximum environmentally acceptable level of lead in any nontoxic shot is trace amounts of <1 percent and has incorporated this requirement (50 CFR 20.134(b)(5)) in the December 1, 1997, final rule (62 FR 63608). Kent documented that tungsten-matrix shot has no residual lead levels equal to or exceeding 1 percent.

The third condition of final unconditional approval involves enforcement. In the August 18, 1995 **Federal Register** (60 FR 43314), the Service indicated that final unconditional approval of any nontoxic shot would be contingent upon the development and availability of a noninvasive field testing device. This requirement was incorporated into regulations at 50 CFR 20.134(b)(6) in the December 1, 1997, final rule (62 FR 63608). A noninvasive field testing

device is under development to separate tungsten-matrix shot from lead shot. Tungsten-matrix shot cannot be drawn to a magnet as a simple field detection method. The Service incorrectly stated in the proposed rule of October 19, 1998, that tungsten-matrix was magnetic (63 FR 55842).

In summary, this rule amends 50 CFR 20.21(j) by temporarily approving tungsten-matrix shot as nontoxic for the 1998-99 migratory bird hunting season throughout the United States, except for the Y-K Delta in Alaska. It is based on the request made to the Service by Kent Cartridge on September 18, 1997 (subsequently modified), the toxicological reports, and the acute toxicity studies. Results of the toxicological report and 30-day toxicity test undertaken for Kent Cartridge indicate the apparent absence of any deleterious effects of tungsten-matrix shot when ingested by captive-reared mallards or to the ecosystem. Final unconditional approval of tungsten-matrix shot as nontoxic for the entire U.S. will not be considered until all required chronic toxicity/reproductive tests have been successfully completed and the results are reviewed and approved by the Director.

Public Comments and Responses

The October 19, 1998, proposed rule published in the **Federal Register** (63 FR 55840) invited public comments from interested parties. The closing date for receipt of all comments was November 18, 1998. During this 30-day comment period, the Service received eight comments.

The California Waterfowl Association strongly supported the proposed temporary approval of tungsten-matrix shot for the 1998-99 season. They believed that temporary approval of tungsten-matrix shot was an important step to address concerns relating to efforts to reduce unnecessary crippling of waterfowl through development of more effective nontoxic shot materials.

The Wildlife Legislative Fund of America encouraged the Service to approve tungsten-matrix shot for the 1998-99 season. They believe that approval of tungsten-matrix would help fulfill the objective of making lead shot substitutes available to hunters.

The International Association of Fish and Wildlife Agencies supported temporary and conditional approval of tungsten-matrix shot for the 1998-99 season. They acknowledged that final approval is pending successful completion of further testing.

The Wisconsin Department of Natural Resources (Wisconsin) supported temporary approval of tungsten-matrix

provided there is no scientific evidence that indicates it is toxic to waterfowl or the environment. However, Wisconsin expressed concern about the timing of the proposed and final rules and the confusion that it creates for hunters. They encouraged the Service to initiate publication of rules concerning nontoxic shot before August 1 to allow proper planning by States.

The National Rifle Association urged the Service to temporarily approve tungsten-matrix shot for the remainder of the 1998–99 season. They further expressed their support of research and development of ballistically efficient nontoxic shot ammunition.

The WILDFOWL.NET organization expressed concern that the Service has not taken steps to approve tungsten-matrix shot in a prompt manner. They questioned why the Service could not approve a generic tungsten shotload, in a manner similar to steel shot. Finally, they inquired whether the Service intends to either arrest and/or cite waterfowl hunters that use tungsten-matrix shot prior to granting final approval of the shot.

Kent Cartridge Company (Kent) supported prompt conditional approval of tungsten-matrix shot for the 1998–99 waterfowl hunting season. They stated that they fully intend to complete chronic toxicity/reproductive testing on tungsten-matrix shot that is required before final approval can be considered. Kent pointed out that the concentration of lead in their shot is below the 1 percent level that the Service has stipulated for nontoxic shot. Furthermore, they indicated that noninvasive field testing equipment for detecting tungsten-matrix shot is expected to be available shortly.

The Federal Cartridge Company (Federal) noted that a complete description of candidate shot materials must be submitted to the Director, and that a complete description of tungsten-matrix shot was not published in the **Federal Register**. Federal also questioned whether the 2 percent iron, referenced in the initial application, was removed from the candidate shot as it was not mentioned in the October 19 proposed rule description. Lastly, Federal questioned whether tungsten-matrix shot could be drawn to a magnet as a field test method.

Service Response: Regarding the timing of the rulemaking, the Service recognizes the information dissemination problems caused by conditionally approving tungsten-matrix shot at this time. However, the Service acts on nontoxic shot applications as they are received. Therefore, when applications are approved, either

conditionally or permanently, the Service proceeds with the application process regardless of the timing of hunting seasons. Because Kent's application was being treated under the old nontoxic shot approval process, which provided for conditional approval, the Service decided to proceed with this rulemaking. Providing another nontoxic shot option for hunting waterfowl and coots likely will improve hunter compliance, thereby reducing the amount of lead shot in the environment.

Regarding the assertion that the Service has not processed temporary approval of tungsten-matrix shot in a prompt manner, we stress that the Service made every attempt to process Kent's application as quickly as possible.

Regarding the question of whether approval can be given for generic tungsten shots, we point out that for the three tungsten shot applications currently being processed by the Service (tungsten-iron, tungsten-polymer, and tungsten-matrix), no data has been submitted on the required chronic toxicity/reproductive tests. Without such information, it would not be prudent to approve a generic tungsten shot type. The revised test protocol for nontoxic approval procedures (50 CFR 20.134) published in the **Federal Register** on December 1, 1997 (62 FR 63608) established a three-tier approval process. The system has three tiers, with each tier enhancing the information base on the candidate material. Those candidate materials where appropriate background information, toxicological data, ecological risk assessment, and reproductive effects information are available demonstrating the candidate material to be benign may receive nontoxic approval. Applications for nontoxic approval of candidate shots submitted after December, 1997, must satisfy all information requirements determined by the Service before any form of approval can be granted. Without chronic toxicity/reproductive test data (Tier 3) there would be insufficient information to approve future tungsten shot applications under the new test protocol. Furthermore, depending on the specific composition of future tungsten candidate shot types and associated concerns over their toxicity, there may be sufficient cause for requiring additional information before approval can be granted.

Regarding whether the Service intends to arrest or cite waterfowl hunters that use tungsten-matrix shot prior to granting final permanent approval of the shot, we would like to clarify that the Service is not requiring

final permanent approval of tungsten-matrix shot before making it legal for the 1998–99 season. Final permanent approval of tungsten-matrix will not be considered until results from chronic toxicity/reproductive testing, scheduled to be conducted during spring 1999, are submitted to the Service for review. We emphasize that this rule grants temporary approval of the shot for hunting waterfowl and coots for the remainder of the 1998–99 hunting season only. Therefore, as of the publication date of this rule and for the remainder of the 1998–99 season only, hunters using tungsten-matrix to hunt waterfowl and coots during the current season would be in compliance with the law and should not be cited.

The Service is pleased that Kent intends to complete the required chronic toxicity/reproductive testing of their tungsten-matrix shot. We look forward to reviewing the results of such tests as soon as possible so that a decision can be made on the shot's nontoxic status before the 1999–2000 hunting season.

Regarding the questions on shot composition, the composition of tungsten-matrix shot approved by this rule is not magnetic and no longer contains 2 percent iron. Both of these issues were oversights on our part in the October 19 proposed rule. Regarding the completeness of the description of the subject shot material, Kent included a complete description of tungsten-matrix shot in their application to the Service, including the specific polymers used in the shot. Sufficient information was contained in Kent's application to allow the Service to assess short-term toxicity of the shot and subsequently grant temporary approval for the remainder of the 1998–99 hunting season. Because Kent requested that the Service not divulge proprietary information concerning the nature of the polymers used in their shot, the exact description of the polymers will not be published.

Effective Date

Under the APA (5 U.S.C. 553 (d)) the Service waives the 30-day period before the rule becomes effective and finds that "good cause" exists, within the terms of 5 U.S.C. 553(d)(3) of the APA, and this rule will, therefore, take effect immediately upon publication. This rule relieves a restriction and, in addition, it is not in the public interest to delay the effective date of this rule. During the public comment period for temporary conditional approval the Service received eight comments. Of these comment letters, six were from conservation organizations, one was from a State natural resource agency,

and one was from an ammunition manufacturer. All objections/comments have been remedied satisfactorily and are discussed under the **PUBLIC COMMENT AND RESPONSES** section of this document. It is in the best interest of migratory birds and their habitats to grant temporary conditional approval to tungsten-matrix shot as nontoxic for the 1998–99 migratory bird hunting season. It is in the best interest of the hunting public to provide them an additional legal option for hunting waterfowl and coots for the 1998–99 season, which began on September 1, 1998. It is in the best interest of small retailers who have stocked tungsten-matrix shot for the current season. The Service believes another nontoxic shot option likely will improve hunter compliance, thereby reducing the amount of lead shot in the environment.

References

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NEPA Consideration

In compliance with the requirements of section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(C)), and the Council on Environmental Quality's regulation for implementing NEPA (40 CFR 1500–1508), the Service prepared an Environmental Assessment in October 1998. This EA is available to the public at the location indicated under the **ADDRESSES** caption. Based on review and evaluation of the information in the EA, the Service has determined that amending 50 CFR 20.21(j) to extend temporary approval of tungsten-matrix shot as nontoxic for the 1998–99 migratory bird hunting season would not be a major Federal action that would significantly affect the quality of the human environment.

Endangered Species Act Considerations

Section 7 of the Endangered Species Act (ESA) of 1972, as amended (16 U.S.C. 1531, *et seq.*), provides that Federal agencies shall “insure that any action authorized, funded or carried out * * * is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of (critical) habitat * * *.” The Service has completed a Section 7 consultation under the ESA for this rule and determined that granting temporary approval of tungsten-matrix shot for the 1998–99 hunting season, except on the Yukon-Kuskokwin (Y–K) Delta, is not likely to affect any threatened, endangered, proposed or candidate species. The result of the Service's consultation under Section 7 of the ESA is available to the public at the location indicated under the **ADDRESSES** caption.

Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601, *et seq.*) requires the preparation of flexibility analyses for rules that will have a significant effect on a substantial number of small entities, which includes small businesses, organizations or governmental jurisdictions. The economic impacts of annual hunting on small business entities were analyzed in detail and a Small Entity Flexibility

Analysis (Analysis), under the Regulatory Flexibility Act (5 U.S.C. 601, *et seq.*), was issued by the Service in 1998 (copies available upon request from the Office of Migratory Bird Management). The Analysis documented the significant beneficial economic effect on a substantial number of small entities. The primary source of information about hunter expenditures for migratory game bird hunting is the National Hunting and Fishing Survey, which is conducted at 5-year intervals. The Analysis utilized the 1996 National Hunting and Fishing Survey which it was estimated that migratory bird hunters would spend between \$429 and \$1084 million nationwide at small businesses in 1998. The approval of tungsten-matrix as an alternative shot to steel will have a minor positive impact on small businesses by allowing them to sell another nontoxic shot to the hunting public. However, the overall effect to hunting expenditures in general would be minor. Therefore, the Service determined this rule will have no effect on small entities since the approved shot merely will supplement nontoxic shot already in commerce and available throughout the retail and wholesale distribution systems. The Service anticipates no dislocation or other local effects, with regard to hunters and others.

Executive Order 12866

This rule was not subject to Office of Management and Budget (OMB) review under Executive Order 12866. E.O. 12866 requires each agency to write regulations that are easy to understand. The Service invites comments on how to make this rule easier to understand, including answers to questions such as the following: (1) Are the requirements in the rule clearly stated? (2) Does the rule contain technical language or jargon that interferes with its clarity? (3) Does the format of the rule (grouping and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? (4) Would the rule be easier to understand if it were divided into more (but shorter) sections? (5) Is the description of the rule in the “Supplementary Information” section of the preamble helpful in understanding the rule? What else could the Service do to make the rule easier to understand?

Send a copy of any comments that concern how this rule could be made easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, N.W., Washington, D.C. 20240. Comments may also be e-mailed to: Exsec@ios.doi.gov.

Congressional Review

In accordance with Section 251 of the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 8), this rule has been submitted to Congress. Because this rule deals with the Service's migratory bird hunting program, this rule qualifies for an exemption under 5 U.S.C. 808(1); therefore, the Department determines that this rule shall take effect immediately.

Paperwork Reduction Act

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The Service has examined this regulation under the Paperwork Reduction Act of 1995 and found it to contain no information collection requirements. However, the Service does have OMB approval (1018-0067; expires 06/30/2000) for information collection relating to what manufacturers of shot are required to provide the Service for the nontoxic shot approval process. For further information see 50 CFR 20.134.

Unfunded Mandates Reform

The Service has determined and certifies pursuant to the Unfunded Mandates Act, 2 U.S.C. 1502, et seq., that this rulemaking will not impose a cost of \$100 million or more in any given year on local or State government or private entities.

Civil Justice Reform—Executive Order 12988

The Service, in promulgating this rule, determines that these regulations meet the applicable standards provided in Sections 3(a) and 3(b)(2) of Executive Order 12988.

Takings Implication Assessment

In accordance with Executive Order 12630, these rules, authorized by the Migratory Bird Treaty Act, do not have significant takings implications and do not affect any constitutionally protected property rights. These rules will not result in the physical occupancy of property, the physical invasion of property, or the regulatory taking of any property. In fact, these rules allow hunters to exercise privileges that would be otherwise unavailable; and, therefore, reduce restrictions on the use of private and public property.

Federalism Effects

Due to the migratory nature of certain species of birds, the Federal government has been given responsibility over these species by the Migratory Bird Treaty

Act. These rules do not have a substantial direct effect on fiscal capacity, change the roles or responsibilities of Federal or State governments, or intrude on State policy or administration. Therefore, in accordance with Executive Order 12612, these regulations do not have significant federalism effects and do not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951) and 512 DM 2, we have evaluated possible effects on Federally recognized Indian tribes and have determined that there are no effects.

Authorship

The primary author of this proposed rule is James R. Kelley, Jr., Office of Migratory Bird Management.

List of Subjects in 50 CFR Part 20

Exports, Hunting, Imports, Reporting and record-keeping requirements, Transportation, Wildlife. Accordingly, Part 20, subchapter B, chapter 1 of Title 50 of the Code of Federal Regulations is amended as follows:

PART 20—[AMENDED]

1. The authority citation for Part 20 continues to read as follows:

Authority: 16 U.S.C. 703–712 and 16 U.S.C. 742 a–j.

2. Section 20.21 is amended by revising paragraph (j) introductory text, and adding paragraph (j)(4) to read as follows:

§ 20.21 Hunting methods.

* * * * *

(j) While possessing shot (either in shotshells or as loose shot for muzzleloading) other than steel shot, or bismuth-tin (97 parts bismuth: 3 parts tin with <1 percent residual lead) shot, or tungsten-iron ([nominally] 40 parts tungsten: 60 parts iron with <1 percent residual lead) shot, or tungsten-polymer (95.5 parts tungsten: 4.5 parts Nylon 6 or 11 with <1 percent residual lead) shot, or tungsten-matrix (95.9 parts tungsten: 4.1 parts polymer with <1 percent residual lead) shot, or such shot approved as nontoxic by the Director pursuant to procedures set forth in 20.134, provided that:

(1) * * *

(4) Tungsten-matrix shot (95.9 parts tungsten: 4.1 parts polymer with <1 percent residual lead) is legal as nontoxic shot for waterfowl and coot hunting for the 1998–1999 hunting season only, except for the Yukon-Kuskokwim Delta habitat in Alaska.

Dated: December 1, 1998.

Donald J. Barry,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 98–32470 Filed 12–7–98; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration****50 CFR Parts 216, 227, and 600**

[I.D. 091498A]

Atlantic Pelagic Fishery; Marine Mammals; Endangered and Threatened Fish and Wildlife; Public Workshops; Correction

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Correction.

SUMMARY: On October 21, 1998, NMFS published a document announcing four of the five workshops for longline vessel operators scheduled during 1998. This document corrects the date for the Barnegat Light, NJ, workshop from December 17, 1998, to December 18, 1998.

DATES: Effective on December 8, 1998.

FOR FURTHER INFORMATION CONTACT: Rebecca Lent, 301–713–2347, Cathy Eisele, 301–713–2322, or Therese Conant, 301–713–1401.

SUPPLEMENTARY INFORMATION: On October 21, 1998, NMFS published a document announcing four of the five workshops for longline vessel operators scheduled during 1998 (63 FR 56094). This correction changes the date for the Barnegat Light, NJ, workshop from December 17, 1998, to December 18, 1998.

In FR Doc 98–28210, published on October 21, 1998 (63 FR 56094) make the following correction. On page 56094, in the second column, under **DATES**, change the date for the fourth workshop to December 18, 1998.

Dated: November 27, 1998.

Bruce C. Morehead,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 98–32533 Filed 12–7–98; 8:45 am]

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