

**Abstract:** A microwave frequency standard is provided which allows for miniaturization down to length scales of order one micron, comprising a modulated light field originating from a laser that illuminates a collection of quantum absorbers contained in a micro-machined cell. The frequency standard of the present invention can be based on all-optical excitation techniques such as coherent population trapping (CPT) and stimulated Raman scattering or on conventional microwave-excited designs. In a CPT-based embodiment, a photodetector detects a change in transmitted power through the cell and that is used to stabilize an external oscillator to correspond to the absorber's transition frequency by locking the laser modulation frequency to the transition frequency. In a stimulated Raman scattering (SRS) embodiment, a high-speed photodetector detects a laser field transmitted through the cell beating with a second field originating in the cell. Both the locked laser modulation frequency and the beat frequency are very stable as they are referenced directly to the atomic transition.

Dated: May 18, 2006.

**Hratch G. Semerjian,**

*Deputy Director.*

[FR Doc. E6-8154 Filed 5-25-06; 8:45 am]

**BILLING CODE 3510-13-P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

[I.D. 051806C]

#### Endangered Species; Permit No. 1298

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

**ACTION:** Notice; issuance of permit modification.

**SUMMARY:** Notice is hereby given that the Riverbanks Zoo and Garden [Principal Investigator, Mr. Charles Scott Pfaff], P.O. Box 1060, Columbia, SC 29202, has been issued an amendment to Permit No. 1298 to extend the expiration date of the permit through May 31, 2007.

#### ADDRESSES:

The modification and related documents are available for review upon written request or by appointment in the following office:

Permits, Conservation and Education Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room

13705, Silver Spring, MD 20910; phone (301) 713-2289, fax (301) 427-2521.

#### FOR FURTHER INFORMATION CONTACT:

Jennifer Skidmore and Kate Swails (301) 713-2289.

**SUPPLEMENTARY INFORMATION:** On May 21, 2001, notice was published in the **Federal Register** (66 FR 27940) that Permit No. 1298 had been issued to the Riverbanks Zoo and Garden for the continued maintenance of eleven adult shortnose sturgeon (*Acipenser brevirostrum*) received from the South Carolina Department of Natural Resources in 1996 for education purposes. This permit amendment extends the duration of the permit from May 31, 2006, to May 31, 2007. The requested modification have been granted under the authority of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*) and the provisions of § 222.306 of the regulations governing the taking, importing, and exporting of endangered and threatened fish and wildlife (50 CFR 222-226).

Issuance of this modification, as required by the ESA was based on a finding that such permit: (1) Was applied for in good faith; (2) will not operate to the disadvantage of any endangered or threatened species; and (3) is consistent with the purposes and policies set forth in section 2 of the ESA.

Dated: May 19, 2006.

**P. Michael Payne,**

*Chief, Permits, Conservation and Education Division, Office of Protected Resources, National Marine Fisheries Service.*

[FR Doc. E6-8179 Filed 5-26-06; 8:45 am]

**BILLING CODE 3510-22-S**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

[I.D. 051906C]

#### Endangered Species; File No. 1579

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

**ACTION:** Notice; Receipt of application.

**SUMMARY:** Notice is hereby given that Alden Research Laboratory, Inc. (Edward P. Taft, Responsible Party), 30 Shrewsbury Street, Holden, MA, 01520, has applied in due form for a permit to take shortnose sturgeon (*Acipenser brevirostrum*) for purposes of scientific research.

**DATES:** Written, telefaxed, or e-mail comments must be received on or before June 26, 2006.

The application and related documents are available for review upon written request or by appointment in the following office(s):

Permits, Conservation and Education Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; phone (301) 713-2289; fax (301) 427-2521; and Northeast Region, NMFS, One Blackburn Drive, Gloucester, MA 01930-2298; phone (978) 281-9328; fax (978) 281-9394.

Written comments or requests for a public hearing on this application should be mailed to the Chief, Permits, Conservation and Education Division, F/PR1, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910. Those individuals requesting a hearing should set forth the specific reasons why a hearing on this particular request would be appropriate.

Comments may also be submitted by facsimile at (301) 427-2521, provided the facsimile is confirmed by hard copy submitted by mail and postmarked no later than the closing date of the comment period.

Comments may also be submitted by email. The mailbox address for providing email comments is [NMFS.Pr1Comments@noaa.gov](mailto:NMFS.Pr1Comments@noaa.gov). Include in the subject line of the email comment the following document identifier: File No. 1579.

**FOR FURTHER INFORMATION CONTACT:** Kate Swails or Jennifer Skidmore (301) 713-2289.

**SUPPLEMENTARY INFORMATION:** The subject permit is requested under the authority of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*) and the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR 222-226).

The applicant proposes to conduct research on entrainment and impingement rates for selected bar rack and bypass configurations in attempt to identify design criteria for a downstream passage facility at the Hadley Falls Hydroelectric Project on the Connecticut River. The applicant would use captive-bred sturgeon and all testing would take place in the Alden Lab testing flume. Annually, up to 200 sturgeon would be transported from hatcheries, measured, handled, Passive Integrated Transponder tagged, and participate in the flume testing. At the end of the five-year study the sturgeon would be sacrificed.