**Qualifications Form for NMFS Permits**

**Instructions:** Please fill out this form. See examples of completed forms by permit type on our [website](https://www.fisheries.noaa.gov/protected-species-permits?title=&directed_take_permits%5B1000006466%5D=1000006466&sort_by=title).

Persons authorized as the [**Principal Investigator**](https://apps.nmfs.noaa.gov/docs/appendix_II_personnel_def.pdf) (PI) or [**Co-Investigators**](https://apps.nmfs.noaa.gov/docs/appendix_II_personnel_def.pdf) (CI) must demonstrate qualifications commensurate with their duties. **If sufficient experience is not provided, personnel will not be authorized to conduct the proposed activities.**

# 1. Contact Information

 All documentation submitted will be publicly available. **DO NOT** include personal information (e.g., social security number, date of birth, home phone).

**Name** (first, middle initial, last):

**Title**:

**Affiliation**:

**Business e-mail address:**

**Business phone number**:

**2. Table 1. Relevant Education**

|  |  |  |  |
| --- | --- | --- | --- |
| **Degree** | **Major/Field of Study** | **Institution and Location** | **Year Received** |
|  |  |  |  |
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# 3. Relevant Experience

#  Table 2. Relevant Professional History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Job Title** | **Role** | **Affiliation** | **Location** **(City, State, Country)** | **Dates** **(MM/YY- MM/YY)** |
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# B. Summary of Experience

Please choose Option 1 (Table) **OR** Option 2 (Biosketch). Delete the option not used.

# Option 1- TABLE. In the table below:

1. List **all procedures** that you are requesting to perform **under** **any NMFS permit**. See Appendix 1 for a list of commonly used procedures (e.g., captive research, collect gametes, field planting, tissue sampling).

Do not include procedures for which you have no experience, training or education. Note you may update your Qualifications Form at any time. Only combine procedures in the same row for which you have the same experience metrics.

1. Experience Metrics for each procedure:
	1. To the best of your ability, estimate the number of animals, how long you have been performing the procedure(s) (e.g., hours/months/years), by species and age class.
	2. Most recent year performed.
	3. Select the level of experience:

**Level 1:** I have received education/training in performing this procedure, but have **not successfully performed** the procedure.

**Level 2:** I have performed this procedure while **under supervision or training** of an expert (e.g., PI, CI, or veterinarian).

**Level 3**: I have performed this procedure **without supervision** by a PI/CI.

**Level 4:** I am considered an **expert**in performing this procedure, and I have **supervised or trained** others in performing this procedure.

Table 3. Summary of Experience.

|  |  |  |  |
| --- | --- | --- | --- |
| **Procedures** | **Experience Metrics: Estimated Number of Animals, Hours/Months/Years, Species, and Age Class** | **Most Recent Year Performed** | **Level of Experience** |
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# Option 2- BIOSKETCH

Provide a biosketch describing your experience with **all procedures** that you are requesting to perform **under** **any NMFS permit**. See Appendix 1 for a list of commonly used procedures (e.g., captive research, collect gametes, field planting, tissue sampling). To the best of your ability, include experience metrics to **estimate the number of animals by species and age class and how long you have been performing the procedure (e.g., months/years)**.

**Avoid** vague phrases such as “*assisted with,*” or “*participated in,*” which qualify only as Level 1 experience and will not adequately demonstrate your experience performing the procedure if you have Level 2 experience or above. You may use the Level 1-4 categories described in Option 1 to supplement the descriptions of your experience.

**4. Relevant Training, Certificates, or Licenses**

Include additional information to support your qualifications including **specialized training** (e.g., disease treatment) and **certificates or licenses** (e.g., diver certification) received **relevant to the procedures in Table 3 or your Biosketch**. For training, include description of training, year(s) received, and institution or expert who trained you. For certificates or licenses, include year received and expiration date.

**5. Relevant Peer-reviewed Publication History** (2 pages maximum)

List your **relevant** publication history **to support your qualifications**. This list does not need to be exhaustive, but should demonstrate that you have published and are reasonably likely to publish in peer-reviewed journals, or make results of permitted research available. You may provide a link to a webpage or Google scholar list for your complete publication history.

**6. Relevant Reports and Presentations** (1 page maximum)

List other reports or presentations **to support your qualifications** as described above.

**Appendix 1. Procedures available for pillar coral.**

| **Pillar Coral** |
| --- |
| Captive research  |
| Collect, dead parts  |
| Collect, gametes/larvae (wild)  |
| Collect, whole or part of colony (live)  |
| Export  |
| Field experiments  |
| Field planting (outplanting)  |
| Field planting (transplant/relocate)  |
| Import  |
| Mark or tag  |
| Other  |
| Other Restoration  |
| Sample, tissue  |
| Sample, mucus swab  |
| Receive, domestically  |
| Transfer/transport, dead  |
| Transfer/transport, live  |
| Treatment |

**Qualifications Form for ESA Permit - Example**

# 1. Contact Information

 **Name (first, middle, last)**: Jane D. Doe

**Title**: Biologist

**Affiliation**: NMFS Southeast Fisheries Science Center

**Business e-mail address**: jane.doe@noaa.gov

**Business phone number**: 555-867-5309

**2. Table 1. Relevant Education**

| **Degree** | **Major/Field of Study** | **Institution and Location** | **Year Received** |
| --- | --- | --- | --- |
| M.S. | Marine Biology | University of Florida | 2004 |
| B.S. | Biology | Duke University | 2002 |

# 3. Relevant Experience

#  Table 2. Relevant Professional History

| **Job Title** | **Role** | **Affiliation** | **Location** | **Dates** |
| --- | --- | --- | --- | --- |
| Biologist | Fisheries Biologist | NMFS Southeast Fisheries Science Center | Miami, Florida, USA | 5/11- Present |
| Adjunct faculty | Professor | University of California, Davis | Davis, California, USA | 1/15- 5/17 |

# B. Summary of Experience

# Option 1- TABLE

Table 3. Summary of Experience (example for fish, sea turtle, and coral experience).

| **Procedures** | **Experience Metrics: Estimated Number of Animals, Hours/Months/Years, Species, and Age Class** | **Most Recent Year Performed** | **Level of Experience** |
| --- | --- | --- | --- |
| Tagging (PIT, Dart) fish | Successfully tagged >100 Atlantic sturgeon and >50 shortnose sturgeon, juvenile/adult | 2016 | 3 |
| Gastric lavage fish | Successfully lavaged >20 Atlantic sturgeon and >15 shortnose sturgeon, juvenile/adult | 2015 | 2 |
| Anesthesia (MS-222 and electronarcosis) fish | Successfully used anesthesia during field operations >75 Atlantic sturgeon and >50 shortnose sturgeon, juvenile/adult | 2014 | 3 |
| Blood sampling for fish | Successfully collected blood from >20 Atlantic sturgeon and >20 shortnose sturgeon, juvenile/adult | 2013 | 4 |
| Fin ray sampling fish | Successfully sampled the first fin ray and the second fin ray (~15 Atlantic sturgeon and ~10 shortnose sturgeon) | 2013 | 3 |
| Biopsy sampling for turtles | Biopsy sampled 60 leatherback, green, and hawksbill sea turtles combined over 4 years | 2017 | 3 |
| Epoxy based transmitter attachments for turtles | Tagged 3 hawksbill, 8 loggerhead, and 4 Kemp’s ridley sea turtles in one field season | 2012 | 3 |
| Medial ridge tag attachments for turtles | Tagged 10 leatherback sea turtles over 3 field seasons | 2008 | 4 |
| Tangle Netting for turtles | Captured 25 juvenile sea turtles by tangle net over 2 years | 2014 | 3 |
| Collecting live coral and tissue samples | Collected fragments of live coral from >40 colonies, tissue samples from >40 colonies for genetic analysis, and >40 unattached corals of opportunity over 3 years | 2023 | 4 |
| Field planting coral | Outplanted >100 coral colonies over 2 years | 2023 | 3 |
| Other coral restoration | Reattached >50 coral colonies dislodged by a vessel grounding over 2 weeks | 2020 | 3 |
| Collecting gametes | Collected gametes from 10 colonies over 1 spawning season | 2022 | 2 |
| Transporting live coral | Transported 60 coral fragments by car and shipped larvae from 10 coral colonies by commercial carrier to other facilities  | 2022 | 2 |

# Option 2- BIOSKETCH

Example Biosketch 1 (fish):

John Doe has more than 7 years field experience and 15 years laboratory experience in sturgeon research including:

Capture of all life stages using gill nets, trawls, and trammel nets.

Tagging: 7 seven years experience in tagging sturgeon, including 3 years external tagging for approximately 100 sturgeon (satellite); and 4 years internal tagging for approximately 30 sturgeon (PIT, dart). Trained by Jane Doe in 2012 on methods for internal tagging, including suturing.

Anesthesia: Used MS-222 in the field and laboratory for the past 7 years for more than 100 sturgeon. Trained by Jane Doe in electronarcosis in 2014 and have used it successfully in the field since 2015.

Blood sampling: Successfully collected blood samples from approximately 75 Atlantic sturgeon in the laboratory and field. Trained by Jerry Doe in 2002.

Example Biosketch 2 (fish):

Mr. Fin has more than 7 years experience in sturgeon research. He has successfully used multiple sampling techniques in a laboratory setting since 2002 and in the field since 2010. Mr. Fin has 7 years experience tagging sturgeon, including PIT/Dart (7 years), internal tagging (5 years) and external tagging (3 years) which resulted in more than 150 fish being successfully tagged (100 internal [acoustic] and 50 external [satellite]). Dr. Smith trained him in all tagging techniques. He has used both methods of anesthesia successfully in both the lab and field for more than 100 animals and was trained by Dr. Apple on the use of electronarcosis in 2013. Mr. Fin has successfully collected blood from >200 sturgeon and was trained by Dr. Smith in 2002. In 2005, Mr. Fin was trained by Dr. Apple on methods to sample fin rays for aging. Mr. Fin has successfully sampled >20 fin rays since 2008. Mr. Fin has successfully conducted all the above mentioned procedures unsupervised. Since 2015, Mr. Fin has trained one graduate student in these methods.

Example Biosketch 3 (turtle):

Dr. Jane Doe has more than 20 years of experience in sea turtle research including:

Entanglement Nets: 6 years of experience capturing over 60 loggerhead sea turtles by tangle net.

Flipper Tagging: 10 years of experience applying flipper tags to approximately 100 nesting loggerheads on Florida beaches. PIT Tagging: 20+ years of experience applying PIT tags to over 250 juvenile, subadult and adult sea turtles. Biopsy Sampling: 15+ years of experience in biopsy sampling for over 500 juvenile, subadult, and adult sea turtles, including 2 years of experience in remote sampling using a biopsy pole. Gastric Lavage: 3 years of experience performing gastric lavage on approximately 15 juvenile green sea turtles. Blood Sampling: 5 years of experience collecting blood from more than 100 adult green sea turtles. Telemetry attachments: 10 years of experience attaching satellite tags by epoxy or resin to more than 50 hardshell sea turtles (loggerhead and Kemp’s ridley), 2 years of experience in attaching satellite tags directly to the medial ridge of 10 leatherback sea turtles, and 2 weeks of experience performing leatherback pygal attachments for pop-up archival tags for 6 animals.

Example Biosketch 4 (turtle):

Mr. Smith has 25 years of experience in sea turtle in-water field research. He also has performed saturation flipper tagging on nesting beaches in the Atlantic and Pacific Oceans of hundreds of hardshell and 50 leatherback sea turtles including measuring, weighing, and photographing animals since 2000. In 2002, he remotely suction-cup tagged 5 leatherbacks in the Pacific. From 2005-2008, he independently conducted captures of over 100 loggerhead, green and Kemp’s ridley sea turtles by hand, rodeo, hoop net, trawl, and tangle net. He then biopsy sampled, flipper tagged, PIT tagged, weighed, measured, and collected blood from all captured turtles. He has over a decade of experience navigating research vessels and small boats to approach hundreds of sea turtles and in 2010, operated an autonomous underwater vehicle to track tagged turtles. He has experience applying telemetry tag attachments to over 40 juvenile, subadult, and adult sea turtles by suction cup, epoxy, and resin.

Example Biosketch 5 (pillar coral):

Emily Johnson has 3 years of experience in coral restoration working with 7 species of coral. She has collected >40 coral fragments, >40 unattached corals of opportunity, and >40 tissue samples from 7 species of coral. In 2023, she trained 2 new staff members in the organization in collection methods. She has outplanted >100 coral colonies of 5 species over the last 2 years and in 2020 reattached >50 coral colonies dislodged by a vessel grounding. Last year under supervision, she collected gametes from 10 coral colonies and shipped the resulting larvae to another facility. She also transported 60 fragments of coral by car to two other organizations under the supervision of the director of nursery operations.

**4. Relevant Training, Certificates, or Licenses**

* + - UAS Certifications/Training: I have been an FAA Pilot in Command since 2010 (License No. 12345). I was trained by John Smith in 2009. Since 2009, I have over logged over 100 flights, totaling over 25 hours of flight time, including 50 flights for sea turtles.
		- Biopsy Sampling: I was trained by Dr. X in 2005 including instruction and target practice.
		- Coast Guard Captain’s license, expires February 2019
		- PADI Open Water Diver Certified (2012)
		- CPR/AED Certification (2010, 2012)
		- Water Safety Instructor (WSI) Certification (2010-2016)
		- Boating safety course (NOAA), April 2016
		- Wilderness First Responder (exp: Jan 2019)
		- Leave No Trace Trainer (since June 2000)

**5. Relevant Peer-reviewed Publication History** (2 pages maximum)

Doe, J. and J. Smith. 2016. Unmanned aircraft systems for sea turtles. Turtle Science.

10(1): 1-5.

**6. Relevant Reports and Presentations** (1 page maximum)

Report: Doe, J. 2015. Implementing biopsy sampling in the Southeast, 2010-2015. Final report to NOAA SERO, award number 1234.

Invited speaker: “Unmanned aircraft systems for turtles”. NOAA Northeast Fisheries Science Center, Woods Hole, MA, October, 2016.

Poster presentation: Doe, J. Unmanned aircraft systems for turtles. Biennial Conference on the Biology of Marine Turtles, Tampa, FL, December, 2011.

Book chapter: Doe, J. 2010. Biopsy sampling. Pages 1-10 in Encyclopedia of Marine Turtles, Second Edition. Edited by J. Smith. Academic Press, San Diego, CA.