**Appendix Ia**. WKMSEL 2012 macroscopic maturity scale description for viviparous elasmoblanch Females

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| **Viviparous elasmobranchs (skates and sharks) - FEMALES** | | | |
| **MATURITY/**  **MATERNITY** | **STAGE** | | **DESCRIPTION** |
| IMMATURE | 1 | IMMATURE | **Ovaries:** small and whitish; undistinguishable ovarian follicles.  **Oviducal gland:** often not visible. In some species a thickening of the uteri where the gland will develop may be visible  **Uteri:** thread-like and narrow. |
| 2 | DEVELOPING | **Ovaries**: folliclesof different stages of development. Some small and medium sized yolked follicles may be present.  **Oviducal gland**: distinguishable and developing  **Uteri**: enlarging |
| MATURE | 3 | CAPABLE to REPRODUCE | **Ovaries**: presence of large yolked follicles ready to be ovulated.  **Oviducal glands**: fully developed  **Uteri**: fully developed. |
| MATERNAL | 4a | EARLY  PREGNANCY | **Uteri:** well filled and rounded with yolk content (usually candle shape). Embryos cannot be observed. |
| 4b | MID  PREGNANCY | **Uteri:** well filled and rounded. Embryos are always visible, small and with a relatively large yolk sac. |
| 4c | LATE  PREGNANCY | **Uteri:** embryos fully formed, yolk sacs reduced or absent. |
| 5 | POST-PARTUM | **Ovaries**: shrunken without follicle development and with atretic (degenerating) follicles.  **Uteri:** enlarged and flaccid. |
| MATURE | 6 | REGENERATING | **Ovaries**: large with small and medium sized yolked follicles. Pre-ovulatory follicles absent. Atretic follicles may be present.  **Oviducal glands**: fully developed but may be reduced in size.  **Uteri**: enlarged. |

**Appendix Ib**. WKMSEL 2012 macroscopic maturity scale description for viviparous elasmoblanch Males

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| **Viviparous elasmobranchs (skates and sharks) - MALES** | | | |
| **MATURITY** | **STAGE** | | **DESCRIPTION** |
| IMMATURE | 1 | IMMATURE | **Claspers:** flexible, non calcified and usually shorter than pelvic fins.  **Testes**: small and undeveloped  **Ducts**: straight and thread-like. |
| 2 | DEVELOPING | **Claspers:** flexible, partially calcified and as long as or longer than pelvic fins.  **Testes**: developing and may start to segment in sharks; in rays lobules clearly visible but do not occupy the whole surface.  **Ducts**: developing and beginning to coil. |
| MATURE | 3a | CAPABLE  TO  REPRODUCE | **Claspers:** rigid, fully calcified, longer than pelvic fins  **Testes**: fully developed; for some shark species testes are fully segmented  **Ducts**: tightly coiled and filled with sperm. |
| 3b | ACTIVE | **Claspers:** similar to stage 3a, however with clasper glands dilated, sometimes swollen. Sperm may be present in clasper groove or glands.  **Testes**: similar to stage 3a.  **Ducts**: sperm observed inside after a cut or flowing out of the cloaca on pressure~~.~~ |
| 4 | REGRESSING | **Claspers**: fully formed, similar to stage 3. Testes shrunken and flaccid, (in skates, with few visible lobules). On pressure sperm does not flow.  **Sperm ducts**: empty and flaccid. Seminal vesicle developed but empty |